

Fostering Resilience Through Art Education for Children with Severe Physical Disabilities

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Abstract

The purpose of this study is to measure the effects of fostering resilience through art education for students with severe physical disabilities ages 7-21. Recent trends of fostering resilience through art education were explored. Current attitudes towards art education for severely disabled individuals were also explored. Of particular interest to the researcher is how efforts to foster resilience in the art classroom can be adopted to provide a more appropriate art pedagogy for working with student with severe physical disabilities. A proposal is set forth to conduct and collect research on an eight-week art club which combines a thematic pedagogy with the factors that protect from trauma. The data collected provides an investigation into whether or not fostering resilience through art education is a viable approach to working with students with severe physical disabilities. The study also analyzes participants' awareness and observed increase of the factors that build resilience throughout the duration of the art club. Teacher and caregiver input is also included in order to better understand why this approach to art education may be beneficial to students with severe physical disabilities.

Table of Contents

Title Page.....	1
Abstract.....	2
Table of Contents.....	3-6
List of Figures.....	7
Chapter I: Introduction.....	10-24
Background to the Problem.....	10
Problem Statement and Research Questions.....	11
Theoretical Framework.....	15
Significance of the Study.....	17
Limitations of the Study.....	18
Definition of Terms.....	19
Assumptions to Be and Not to Be Debated.....	21
Summary.....	23
Chapter II: Review of the Literature.....	25-43
Introduction.....	25
Trauma and Teaching Art.....	25
Art Education and Students with Severe Disabilities.....	27
Resilience Theory and Art Education.....	30
Students with Severe Disabilities, Adversities, and Art Education.....	34
Severe Physical Disability, Orthopedic Impairment and Cerebral Palsy Explained.....	40
Summary.....	43

Chapter III: Methodology.....	44-58
Design of the Study.....	44
Setting.....	44
Participants.....	44
Researcher Role.....	45
Research Procedures.....	45
Ethical Considerations.....	45
Research Methods.....	46
Type of Study.....	46
Methods to be used.....	47
Data Collection.....	48
Context of your study.....	48
Literature sources.....	48
Pre-non-participant data protocol.....	49
Interview protocol.....	49
Survey protocol.....	52
Artwork/process observation protocol.....	53
Limitations.....	54
Data Analysis.....	55
Organization of Data.....	55
Coding of Data.....	56
Methods of Analysis.....	56
Timeline for the Study.....	56

Chapter IV: Results of Data Collection and Findings.....	59-90
Introduction to the Data Collection Process.....	59
Lesson Plans and Interview Summaries.....	62
Lesson Plans.....	62
Interview.....	70
Observations and Assessments.....	71
Data Presentation and Documentation.....	73
Surveys.....	74
Observations.....	77
Data Analysis.....	81
Surveys and interviews.....	81
Observations.....	85
Findings.....	87
Chapter V: Conclusions.....	91-92
Implications for the Field.....	91
Next Questions.....	92
References.....	92-95
Bibliography.....	96-99

Appendix A	101-109
Protocols.....	102
Surveys.....	105
Lesson Plan.....	108
Appendix B	111-119
Permission forms.....	112

List of Figures

Figure 1. Key Concept Map.....	15
Figure 2. Key Terms: Severe Physical Disabilities.....	43
Figure 3. Student Background Information Chart.....	62
Figure 4. Molly's Self-Identifying Selfie.....	63
Figure 5. Heather's What I Like Collage.....	64
Figure 6. Sadie's What I Like Collage.....	64
Figure 7. Kari's What I Don't Like Cyanotype.....	65
Figure 8. Heather's What I Don't Like Cyanotype.....	65
Figure 9. Detail of Sadie's When I Grow Up Painting.....	66
Figure 10. The "Awesome" Art Club Posing in Funny Face Masks.....	67
Figure 11. Kari Accesses the Internet.....	68
Figure 12. Wax Resist Materials.....	69
Figure 13. Wax Resist Experimentation.....	69
Figure 14. Observation of Students' Typical Art Class Graph.....	73
Figure 15. Student Participant Survey Graph: Humor.....	74
Figure 16. Student Participant Survey Graph: Creativity.....	74
Figure 17. Student Participant Survey Graph: Perseverance.....	75
Figure 18. Student Participant Survey Graph: Flexibility.....	75
Figure 19. Student Post-Interview/Surveys Graph.....	76
Figure 20. Teacher/Caregiver Survey Chart.....	76
Figure 21. James' What I Want to Know More About Collage.....	79

Figure 22. Sadie Poses in a Mask.....	81
Figure 23. Sadie Works on Her Mask.....	82
Figure 24. Student Theme Choice Chart.....	82
Figure 25. When I Grow Up Paintings.....	83
Figure 26. Kari's Certificate of Achievement.....	87

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Chapter 1: Introduction

Background to the Problem

Walking into HMS School for Children with Cerebral Palsy can be overwhelming for individuals who are unaccustomed to being around such a large population of children with severe disabilities. While the level of severity that the students' impairment affects them may seem disheartening to newcomers, the feeling does not usually last long. Students at HMS are generally some of the most resilient, good-natured individuals and it is not uncommon to observe them overcoming obstacles and enjoying life. Be it riding a bicycle, dancing, making art or any other of the numerous activities they participate in throughout the day, it is clear these students are supported by a loving staff that care deeply about the work they do. The atmosphere at HMS is so positive; in fact, that it is quite possible to momentarily forget all the struggles the students there go through on a daily basis.

To accommodate the needs of students with severe physical disabilities students may work with many therapists throughout the week, may come with a lot of gear such as, walkers, wheelchairs, adaptive speech devices, protective headgear, mafos, hand splints, body jackets, feeding tubes etc., and they may have many surgical procedures due to medical issues related to their diagnosis. They may have related poor self-esteem or feelings of helplessness, and they may need help to build self-advocacy skills (Project Ideal, 2013). The known causes of trauma inform us that these students are at-risk (Herman, J.L., 1992).

At the same time students with severe physical disabilities may be experiencing adversities, their art teachers may be experiencing a feeling of incompetency due to lack of hands-on experience in their educational program. This lack of hands-on experience is often more present when it comes to students who have severe disabilities (Cramer, Coleman,

Yuleong, Bell, and Coles, 2015). In my research, I have found the gap to exist more so in the effort to develop appropriate art education pedagogy for students with severe disabilities than it does in accessibility of materials and process.

Problem Statement

Students with severe physical disabilities not only face the challenge of accessing art materials, but they face ongoing adversities that affect them both personally and educationally. Art teachers are often underprepared to teach these students due to lack of hands-on experience (Cramer, Coleman, Yuleong, Bell, and Coles, 2015). Often the training that is available focuses largely on accessing the materials and less on appropriate pedagogy. However, the needs of students with severe physical disabilities due to the adversities they face should and can be addressed through pedagogy. By applying resiliency theory to art education these students can increase the protective factors that are shown to help individuals recover from trauma (Heise, 2014, p.27) and encourage them to use art making for self-care, as they become more involved, independent artists.

I would like to form an art club with children ages 7-21 at HMS school for Children with Cerebral Palsy that focuses on building resiliency through art. HMS is a private- approved school for children with severe physical disabilities, which includes, but is not limited to, cerebral palsy. Through this art club, I would like to gather research that examines how protective factors can be achieved through a resiliency building approach to art education.

I worked as a teacher assistant at HMS school for Children with Cerebral Palsy for five and a half years. During my time there I saw the struggles that children with severe disabilities deal with on a regular basis, and I saw the struggles the people who cared for them experienced in order to meet their various and often overwhelming needs. Many of those needs are obvious. Five and a half years of experience has taught me that physical limitations mean that assistance with self- care is necessary, access to spaces and locations can be inadequate, and communication and learning can be comprised. Over time, however, I also saw needs that were not as obvious upon first encounter. I saw students who faced repeated major surgery; the loss of peers, and the separation of loved ones due to the need to be in a facility that offers an advanced level of care. A study done by researchers Autry and Decoufle in 2002, shows that death rates in students with severe disabilities are high.

“The numbers of observed deaths exceeded those of expected deaths, regardless of the number of disabilities present, but the ratios were statistically significant (at the 95% confidence level) only in children with three or more co-existing disabilities. In general, the magnitude of the mortality ratios was directly related to various measures of the severity of the person’s disability (Autry and Decoufle, 2002, p.375).

What a higher than average mortality rate means in real-life situations is that it can be a common experience for students with severe disabilities to experience the death of their friends due to a disability related complication. In a school of under seventy-five students, I experienced the unexpected death of four students with in a one-year period. The Substance Abuse and Mental Health Services Administration (2011) listed among causes of childhood trauma “loss of a loved one,” “living with a family member whose

caregiving ability is impaired, and having a life-threatening injury or illness.” In my experience I often observed teachers and caregivers who spent a large amount of time and energy focused on the needs that presented themselves plainly while leaving the more complicated situations under-addressed.

In 2014, I began researching the relationship between art and recovery from trauma. This interest stemmed from my personal life, particularly having witnessed the 9/11 attacks on the World Trade Center during my senior year of art school. The question that really intrigued me is “Why is it so important to teach art to populations affected by trauma?” and “Keeping in mind the role of the teacher, and not crossing the therapeutic boundary, how do we teach art to these populations affectively?” Shortly after beginning this research I found the work of Dr. Donalyn Heise (2014), who applies resiliency theory to art education. Her research resonates with me personally as the most appropriate and meaningful approach to teaching art populations disturbed by trauma. In my life, children with severe physical disabilities have constituted the most under addressed populations of students facing trauma. I feel that her approach to art education would be valuable in attending to the needs of children with severe physical disabilities. As my research on this topic narrowed in, I found a study showing that “81.82% of teachers reported having Extremely or Somewhat Extensive knowledge for students without disabilities and 25.68% Extremely or Somewhat Extensive for students with PVSMD (Physical, Visual, Severe and Multiple Disabilities)” (Cramer, Coleman, Yuleong, Bell, and Coles, 2015 p.8). The study showed that art teachers reported more preparedness when they have more hands-on experience and suggested the need for teachers with hands-on experience to pass on that knowledge to others. Reading this

study made me realize that not only is this issue of personal interest to me, but that there is a real need to more effectively address the needs and educate our students with severe disabilities (Cramer, Coleman, Yuleong, Bell, and Coles, 2015, p.8).

With the above in mind, I ask the following research questions:

- Given that 7-21 year old students with severe physical disabilities face emotional challenges due to issues such as separation from loved ones, repeated surgery and the death of peers, and Heise (2014) suggests that resilience theory applied to art education can strengthen protective factors and coping skills in individuals facing new and challenging experiences, in what ways might a strength-and resiliency-building approach to art education impact students with severe physical disabilities?
- Furthermore, how might this strength- and resiliency-building approach to art education that considers students' emotional needs build the confidence and success levels of art teachers working with students with severe physical disabilities?

Thematic Framework



Figure 1. Key Concept Map showing the connection between themes.

On September 11, 2001 at the beginning of my senior year, I stood on the roof of my school building with several other students and teachers and watched as a plane flew into the second World Trade Center Tower. What followed in the next few

hours, weeks and months felt confusing and surreal. Everyone around me was traumatized. It was my last year at Parsons School of Design as a fine arts major. In the attempt to be understanding, the head of our department told us all that we didn't have to make any art work if we didn't want to. I wanted to. I felt I needed to. Today, a short quote remains pressed upon my scrapbook and impressed upon my mind fifteen years from the day I first read it. "She added: 'The artists are all seeing their work in a new light. It's made us realize that what we do is not a luxury; it has real urgency' (Vogel, 2001). Vishanka N. Desai, the senior vice president and director of the Asian Society's museum and cultural programs, made the statement in 2001. She was responding to the repercussions of 9/11 on the expeditions and artists she was working with. The quote stuck with me because it resounded as a powerfully, accurate and true synopsis of the predicament faced by thousands of artists across the city of New York who had witnessed the fall of the World Trade Center, and were now working in the aftermath. It spoke, as well, to the need for art as a societal and psychological imperative. While common perceptions often tend towards viewing art as an auxiliary function of society, history and research prove otherwise. When left in the wake of collective trauma, art is essential to the recovery of the individual. My research thus began with an interest of the relationship between art making and the recovery of trauma (see Fig. 1). As an art education major, it quickly morphed into art education and groups of students who are affected by trauma.

Nine months after 9/11, I graduated from Parsons and moved back to the Philadelphia area. Still in the recovery stage, I took the first job I could find. This led me to begin working with children with special needs. It was one of best defining moments

of my career. I have held several different positions but most my experience is with children on the autism spectrum and children with severe cerebral palsy. While at working at HMS School for Children for Cerebral Palsy, I witnessed students in distress over prolonged separation from family, the death of close friends, and the need for repeated major surgeries. I worked at HMS School for Children with Cerebral Palsy for five years prior to entering as concurrent, art education, Master's with certification student at Moore College of Art and Design. I love the vulnerability and strength of spirit that I saw in the children that I worked with there and I learned a great deal about teaching students with physical disabilities. I came to Moore because I was looking for a way to do more with my skills and interests. Finding an art education program with a special populations emphasis was exactly what I was looking for but had not known existed. While considering how I have witnessed students affected by adversity, I reviewed an article for one of my classes that expressed the need for educators with hands-on experience with students with severe disabilities to pass on that experience to other teachers in order to better prepare them to work with students (Cramer, Coleman, Yuleong, Bell, and Coles, 2015). I began to recognize a connection between the two themes. While there is some available literature about teaching art to students with severe disabilities, it generally focuses on issues of material access. Art making, however, has many aspects beyond the formal. The ability of art to positively affect one's sense of self is an area of focus that I believe warrants more research.

Significance of the Study

The purpose of this study is to discover how resiliency theory as applied to the art classroom can impact students with severe physical disabilities. This study is significant

because students with physical disabilities face many emotional challenges due to issues such as, multiple surgeries, separation from family and the death of peers. Heise (2014) suggests that resiliency theory as applied to art education can strengthen protective factors and coping skills in individuals facing new and challenging situations. The findings of this study will benefit both students with disabilities and the teachers that are struggling to provide them with the best possible education. This study will also be significant to parents and loved-ones of children with physical disabilities who are searching for ways to support and guide their children through extremely "challenging" circumstances. The outcomes of this study have the potential to help change and shape a new understanding about the significance of art in the lives of students with severe physical disabilities.

Limitations of the Study

The limitations of the study begin with time and place. I plan on doing a single case study over one semester, on a small group of students at a specialized school for children with cerebral palsy. The school is a very sheltered environment where children with severe disabilities find similar issues among their peers. This means that some of their issues may be found in higher numbers in a similar setting than in other more diverse settings. It also means students are often "pulled out" for therapy or medical treatment. The most I would be able to do to deal with this problem is to raise awareness to it, and express the importance of being able to gather data. The study is also limited by communication difficulties. Most of the students would have moderate to severe problems with verbal communication. My hope is that I would be able to use the

assistance of those familiar with the student's personal vocabulary (verbal and non-verbal) particularly in conducting interviews or completing surveys.

Most of the restraints of my study are intrinsic to the population that I am studying and therefore there are only minor measures that I can take to avoid them. I believe being as up front as possible about what I need from the process as well as why I am doing the study will help individuals make the most accommodating choices when interacting with me during my research. I would like to approach the matter with several forms of data collection in order to get as much of the picture as possible. I also hope to back up my data with enough related research that it will not have to stand alone, but be backed by the research of others.

Definition of Terms

- Cerebral Palsy- "Cerebral palsy is a disorder of movement, muscle tone or posture that is caused by damage that occurs to the immature, developing brain, most often before birth" (Mayo Foundation for Medical Education and Research, 2016). "Signs and symptoms appear during infancy or preschool years. In general, cerebral palsy causes impaired movement associated with abnormal reflexes, floppiness or rigidity of the limbs and trunk, abnormal posture, involuntary movements, unsteady walking, or some combination of these. People with cerebral palsy may have problems swallowing and commonly have eye muscle imbalance, in which the eyes don't focus on the same object. People with cerebral palsy also may suffer reduced range of motion at various joints of their bodies due to muscle stiffness. Cerebral palsy's effect on functional abilities

varies greatly. Some affected people can walk while others can't. Some people show normal or near-normal intellectual capacity, but others may have intellectual disabilities. Epilepsy, blindness or deafness also may be present" (Mayo Foundation for Medical Education and Research, 2016).

- Fostering resilience through art education- "focusing not on art therapy but art that articulates and celebrates the individual and their collective assets and strengths" (Heise, 2014, p.29).
- Factors that protect from trauma- creativity, positive relationships, humor, independence, positive view of personal future, flexibility, joy of learning, self-motivation, competence or mastery, self-worth, and perseverance (Heise, 2011; Benard, 1991; Bosworth & Walz, 2005; Krovetz, 1999).
- **Causes of trauma** - "A traumatic event is an incident that causes physical, emotional, spiritual, or psychological harm. The person experiencing the distressing event may feel threatened, anxious, or frightened as a result. In some cases, they may not know how to respond, or may be in denial about the effect such an event has had. The person will need support and time to recover from the traumatic event and regain emotional and mental stability.

Examples of traumatic events include:

- ✓ death of family member, lover, friend, teacher, or pet
- ✓ divorce
- ✓ physical pain or injury (e.g. severe car accident)
- ✓ serious illness
- ✓ war

- ✓ natural disasters
- ✓ terrorism
- ✓ moving to a new location
- ✓ parental abandonment
- ✓ witnessing a death
- ✓ rape
- ✓ domestic abuse
- ✓ prison stay" (Healthline, 2016).
- Resilience- "The American Psychological Association ([2014](#)) defines resilience as "the process of adapting well in the face of adversity, trauma, tragedy, threats or even significant sources of stress (para. 4)." While this definition is useful, it does not reflect the complex nature of resilience (see Southwick, Douglas-Palumberi, & Pietrzak, [2014](#) for a discussion). Determinants of resilience include a host of biological, psychological, social and cultural factors that interact with one another to determine how one responds to stressful experiences" (Southwick, S.M., Bonanno, G.A., Masten, A.S., Panter-Brick, C, Yehuda, R., 2014).
- Resilience Theory- "Resilience theory identifies protective factors and characteristics that may increase a person's ability to cope despite adversity" (Heise, 2014).

Assumptions To Be and Not Be Debated

Assumptions not to be debated.

- Given that children with severe physical disabilities have higher than average numbers of trauma causing factors, it will not be debated that they suffer from trauma. However, this fact will be supported with sources because it is a point that often gets ignored or misunderstood (Autry and Decoufle, 2002; Substance Abuse and Mental Health Services Administration 2011).
- Given that the group that I am researching is a small but highly valued to loved ones, caregivers and educators, and their educational rights are protected by law, the relevance of my research to society will not be debated (Individuals with Disabilities Education Act (IDEA), 1990).
- Given that the group that I am researching is specific and not necessarily representative of all groups of children with disabilities, it will not be debated that this research applies to all students with disabilities.
- Given that the most adequate possible communication techniques will be used while collecting data, it will not be debated that these students can accurately respond to data questions (Sterland, E., 2013).

Assumptions to be debated.

- Given that applying resiliency theory to art education is a relatively new pedagogy, it will be debated that it is a practice that is affective in increasing the protective factors that help build resiliency in individuals (Heise, 2014).

- Given that there is no evidence showing that applying resiliency theory to art education has been applied to students with severe physical disabilities it will be debated that this art pedagogy is relevant to students with severe physical disabilities.

Summary

As stated in my Background to the Problem, teachers may struggle to find appropriate art education pedagogy for students with severe physical disabilities. Recent findings and experiences may suggest that fostering resiliency through art may produce positive results for students and teachers alike. As such, this topic is being defined for research in this way. Central to this research is the research question, in what ways might resilience theory applied to art education strengthen protective factors and coping skills in individuals facing new and challenging experiences, and in what ways might a strength-and resiliency-building approach to art education impact students with severe physical disabilities (ages 7-21)? The theories and practices of Donalyn Heise, Sophie Lucido Johnson, Alice Wexler and Lisa Kay will be shown to impact this issue. Though significances and limitations are known, it is felt this topic should be investigated in this assumed way, and as such, issues such as the existence of trauma in children with severe disabilities, the value of fostering resiliency in children with severe physical disabilities, the ability of participants to communicate, and the universality of the research, will not be debated. As will be noted in the forthcoming literature review; topic areas, key terms, and experts in the field such as Donalyn Heise will be shown to impact this new understanding and problem under investigation. In the subsequent methodology chapter,

a descriptive case study of this problem will be conducted with a bounded unit of 5-20 participants at HMS School for Children with Cerebral Palsy place to investigate the impact of these theories on this problem. It is hoped that through this research, and the following data collection and data analysis methods, this problem will be better defined with new understandings, meanings, and practices for the field.

Chapter II: Literature Review

Introduction

Connecting art education to resilience theory appears to be a relatively recent concept. The ideas surrounding it are well based in the history of artmaking, but the formalization of the concept, and the publication of articles on the topic has only happened in the last several years. In my research I was able to find no evidence that a direct attempt to apply resilience theory to art education for children with severe disabilities has been made before. There is at the same time an alarmingly small amount of research connecting students with severe physical disabilities and trauma. This is a true literature gap because it is clear through the evidence we have on what causes trauma, that children with severe physical disabilities are at high risk (Healthline, 2016). Connecting the adversities faced by students with severe physical disabilities and fostering resilience through art education is simply an effort of gathering sources discussing various issues and linking the themes together.

Trauma and Teaching Art

“Order from Chaos: An Arts-Based Approach to Counteract Trauma and Violence” by Lisa Kay and Alice Arnold (2014) tells and shows how images and art making can be used to dialogue and address issue of violence in our culture. This essay calls itself a “visual and textual dialogue of ideas.” It chronicles a lobby session at the 2013 NAEA conference. The idea was to lead teachers in a collage making session that would ask them to consider and engage in a discussion of violence in the community. The essay is an example of the relationship between the art process and catharsis. It

shows how art can be used to start a discussion about deep issues that can be difficult to engage in. This essay conducts research based on autobiographical accounts and first person interviews. They write, “As a result of the lobby gathering and art activity, participants felt validated and empowered to interpret violence in more positive ways. The varied ways of working, the multiple metaphors that surfaced, and the diversity of opinions yielded a greater sense of empathy and understanding for self and others (p. 34).”

I enjoyed learning about this lobby session. It appeared to be a clear use of art to facilitate healing. It was very distinct in both its purpose and clarity. I appreciated that the essay was used as a “call to action”. I wanted to find information about this process being done with different groups of people. This study strongly supports the idea of using art education as a catalyst for discussion, growth and healing from traumatic experiences. It leads to the questions: *how would this session turn out if it was done with a group of teenagers?; How would this session turn out if it was done with students to dialogue about other traumatic experiences?; and how are those art teachers translating their experience into lessons that they do with a class of non-art teachers?*

Lisa Kay continues to be an interesting figure in this field. While my initial introduction to her work led me to many questions about where art teachers could go with this information, her research seems to have led down a path that I am not presently prepared to or interested in going down. In “Constructing, Modeling, and Engaging Partnership” (2016) Kay writes about the Art and Resilience Project that she was a part of facilitating at the Carson Valley Children’s Aid. The agency is a private welfare organization that serves children and families. The Art and Resilience Project was a

collaborative effort where an art teacher, an art therapist and an art therapist/art educator/ art researcher taught adolescent girls. The girls were led in creative writing and mixed media art projects that were based around a thematic focus. This focus encouraged the girls to share and express their ideas and feelings with the goal of building their resiliency. While the concept and the subject of the project is certainly of interest to me, it revolves around the success of collaboration between the art teacher and the art therapist. This collaboration is admirable, but it does not speak to the art educator who lacks the opportunity to collaborate with an art therapist. Kay writes in the article, “Art educators are not art therapists; however, they can provide opportunities to create art in a social context that engages the students in a practice that focuses on the exploration of personal and social ideas and/or identities in visual form” (p. 29). What I am interested in focusing on is the role of the art educator in using best practices to educate and inspire and prepare individuals who may have already, and will likely someday face very difficult situations. Despite the focus of the Art and Resilience Project on collaboration, Kay ends her article by giving K-12 art teachers some very practical advice. *“Establish a classroom culture of caring.”;* *“Help students feel safe and develop trusting relationships.”;* *“Provide boundaries and structure.”;* *“Offer choices within the lesson plan and/or curriculum.”;* *“Infuse instructional units/lesson plans with contemporary artists.”;* *“Practice empathy.”;* *“Use art for self-care.”;* *“Continuing education or professional development.”;* and *“Seek out art therapists as collaborators (pp.29-30)”*.

Art Education and Students with Severe Disabilities

In “Art Educators’ Preparedness for Teaching Students with Physical, Visual, Severe, and Multiple Disabilities” by researchers Cramer, Coleman, Yuleong, Bell and Coles, (2015) we can read the results showing that in general art teachers of students with severe disabilities are underprepared and that most beneficial training to counteract this unpreparedness comes from teachers experienced in working with this population. This is a peer-reviewed article that presents a study done on the preparedness of art teachers of students with physical, visual, severe and multiple disabilities. The statistics show that most art teachers are underprepared, especially those teachers with large classroom size. It details the history of research in this field and finds it an under evaluated area. The article also suggests the need for teachers with direct experience in this field to provide more training for maximum beneficial learning to take place. This study uses surveys and literature review to conduct research. The survey included multiple choice, fill in the blank, open ended, and grid questions. It was refined after initial results to shorten and separate into two surveys, one for teachers, and one for teacher educators, and to modify questions to solicit better answers they included 9 demographic questions. They used IBM Statistical Package for the Social Sciences version 21 (SPSS 21). Collection and analysis was done through the computer program SPSS. They used the Kruskal Wallis one-way analysis of variance and Tukey post hoc comparison method. The discrepancy is clear, “81.82% of teachers reported having extremely or somewhat extensive knowledge for students without disabilities and 25.68% extremely or somewhat extensive for students with PVSMD.” This article inspired me to want to share the knowledge that I have from experience working with students with physical, visual, severe and multiple disabilities. I realized that information I often take for granted as common knowledge is

not common at all and that there is a real need for it to be passed along. The research methods they used appear scientifically based, but are only initial results according to the article. They were very understandable and clear to me and I am glad to have found that this group of authors has published other reports as well. It led me to ask, *in what forms is this knowledge best passed on;? How do we continue to raise awareness of and interest in this issue;? What content did the teachers who felt prepared teach?; and What would students, parents and administrators think about the results? Do they feel the same as the art teachers?*

In 2012, art researcher, Susan Loesl wrote an article published by The Kennedy Center titled “The Intersection of Art Education and Special Education: Exemplary Programs and Approaches- The Adaptive Art Specialist: An Integral Part of a Student’s Access to Art.” The article explains the role of the licensed adaptive art specialist in aiding the art making process of students with disabilities. In this article, she references “Art-Centered Education and Therapy for Children with Disabilities” written by art professor Dr. Frances E. Anderson (1994). These sources, along with “Issues and Approaches to Art for Students with Special Needs” edited by educators, Nyman and Jenkins and “Reaching and Teaching Students with Special Needs Through Art” edited by art educators Gerber and Guay (2006), all provide basic instruction and resources needed by art teachers of students with special needs. What I find lacking in the Loesl article, as well as the other sources, is that while they all hint at the transformational potential of art in the lives of special needs students, they primarily focus on the practical needs. I have noticed this trend among caretakers and loved ones of students with special needs; that the needs are so heavily loaded with basic functional adaptations to the point

that sometimes emotional and social needs get under attended. This trend appears to continue in the field of art education as well. Even in the most practical resources the underlying issues of how art works to instill positive and transformative personal characteristics are evident. Loesl (2012) writes,

Students with social, emotional or behavioral issues may work through some of their personal issues in art class. There is something inherent about the creative process within each of us that can help us become creative and productive members of society. At times, it is the student who discovers alternative ways to use art materials. The art room is the perfect environment to experiment and devise alternative ways to be creative - and does not need to be considered "adaptive." In fact, opportunities to observe creativity in its most basic and pure form are truly moments to savor (p.15).

Resilience Theory and Art Education

When I discovered "Steeling and Resilience in Art Education" by art educator and researcher Donalyn Heise (2014, pp. 26-29.), I finally found evidence of someone who was looking at trauma and healing from an art education standpoint. Art education can develop characteristics that protect individuals from trauma and foster resiliency. This article discusses the application of resilience theory to art education. It explains the nature of trauma and why art can be valuable in developing characteristics that help protect individuals from adversity. It defines the four characteristics commonly found in resilient children and gives suggestions of how these can be fostered in the art classroom.

This article used literature review to collect information. Henderson, Bernard, & Sharp-Light (2007) and Krovetz, (2007) state, “resilient children usually have four attributes in common; social competence, problem-solving skills, autonomy, and a sense of purpose and future. (Henderson, Bernard, & Sharp-Light, 2007; Krovetz, 2007)” and suggests a simple way these characteristics can be fostered in the art room. Heise writes, “give children the opportunity to visually express themselves but don’t require that they relive or retell the traumatic experience. Listen and affirm, but do not try to solve their problem (p. 15)”.

After searching and searching for information on teaching art to traumatized children, I finally found “Steeling and Resilience in Art Education.” Donalyn Heise is a groundbreaker in this area of study. The information she presents resonates with me strongly. This article, however, is based on literature review. I feel that for my purposes there is a strong need to back it up with sources that use first person research. I found myself hunting for more information that supports this approach. I began asking, *are there studies that have been done to prove the effectiveness of this approach to art teaching?; Who else is studying this topic?; and how can this topic be broadened and specified to different populations?* Some of what I found supported Heise’s research; however, it was what I did not find that convinced me to do my own research in this area.

In “Implementing an Art Program for Children in a Homeless Shelter” (2011) Heise writes about her experience, teaching children at an after-school program for a homeless shelter. She explains that her interest in this population stemmed from the unmet needs of homeless children. In the effort to understand those needs she sought to learn more about the cultural and social context the children were living in. Children living with

homelessness had needs beyond the academic needs that most afterschool programs were focusing on. To better meet the needs of the children living in the shelter, the program focused heavily on resilience theory. The article fleshes out that application for us, stating:

Resilience is the belief in the ability of every person to overcome adversity if important protective factors are present in that person's life (Bosworth & Walz, 2005; Krovetz, 1999). Protective factors include a nurturing, caring environment; high expectations and purposeful support; and ongoing opportunities for meaningful participation (Krovetz, 1999). Researchers have identified several characteristics that foster resiliency, including creativity, positive relationships, humor, independence, positive view of personal future, flexibility, joy of learning, self-motivation, competence or mastery, self-worth, and perseverance (Benard, 1991; Bosworth & Walz, 2005; Krovetz, 1999, p.326).

Heise and MacGillivray used quantitative methodology and collected data through: "field notes; analytical notes; lesson plans; interviews with parents, children, and shelter staff; and analysis of children's art (pp.326-327)." The findings are described as such:

In our analysis of implementation, we discerned three key issues to teaching art in this homeless shelter: redefining success, tensions in curriculum and implementation, and managing the children's behavior. We suggest that these are integral to implementation in many contexts; here, we situate them in the particular context of an emergency shelter for homeless families (Heise and MacGillivray, p.328).

One study that supports Heise's research is written about in "Emotional Intelligence Through Art: Strategies for Children with Emotional Behavioral Disturbances" (Johnson, 2013). Washington DC: The Kennedy Center. In this study, early results show that students with Emotional Behavioral Disturbances, especially students suffering from Post-Traumatic Stress Disorder benefit from arts-integrated social emotional interventions. This article follows an Emotional Intelligence Through Art program that took place in small group settings at four New Orleans charter schools post-hurricane Katrina. It begins by explaining the relationship between PTSD and EBD. It follows one case study on a five-year-old girl and how the EITA program was effective in her education. Next it lays out the framework for the EITA program. Lastly, it covers the results, which favored the effectiveness of the EITA program. The article uses literature review based on qualitative research to explain PTSD and EBD. It also uses quantitative research based on rubric and accounts of student behavior referrals. Johnson cites Durlak, Weissberg, Dymnicki, Taylor & Schellinger stating that "researchers generally agree that there are five main elements of social and emotional learning: self-awareness, self-management, social awareness, relationship skills and responsible decision-making. (Durlak, Weissberg, Dymnicki, Taylor & Schellinger, 2011, p.91) She also cites Kauffman & Landrum noting that, "in 2009, an estimated 6 to 10 percent of school-aged children had some kind of emotional or behavioral disorder, but only one percent received formal special education services or interventions. (Kauffman & Landrum, 2009, p.91) What I really appreciated about this article is that it gives a real-life account of art being used to teach emotional intelligence. It works with many of the same concepts as resiliency theory applied to art education and it shows positive results.

It also does two things that are very helpful. First, it defines PTSD and its relationship to EMD. Secondly, it lays out the actual course in enough detail that it could be adopted by another and adapted for another circumstance. It was very clear and easy to understand and backed up the findings with specific numbers in addition to a case study. It begs the question; *how can this course framework be adapted to other populations?*; and *How could EITA be used as a preventative, educational measure?*

Children with Severe Disabilities, Adversities, and Art Education

When I look at populations where I have seen the effects of trauma, I realize that in my opinion, children with severe physical disabilities rank among the top. This is a population I have experience working with, and while some of that experience is in art making, it has never been my pleasure to lead any ongoing art classes with students with severe physical disabilities. One book I found to be an extremely valuable resource when looking at teaching strategies for students with special needs is art educator Alice Wexler's, *Art and Disability: The social and political struggles facing education* (2009). The book stresses that children with all forms of disability can contribute to the art making process according to their abilities without the need to highlight their limitations. It covers several different disabilities and individual arts groups that are working with these students. Included in the list of disabilities is Autism Spectrum Disorder, ADHD (Attention Deficit Hyperactivity Disorder), E/BD (Emotional/ Behavioral Disorder), Blind and Visually Impaired, and Spinal Cord Injury. Wexler shows how these students can and are contributing to the field of art making. In the last chapter, she gives specific suggestions for structuring lessons so that students can take more ownership of their art-

making process. The book uses literature review and case studies to collect data. It is a wealth of information about working with students with disabilities. Although it can be challenging to pull specific data from individual sections of the book, it functions largely as an instructional book for art teachers of students with disabilities. It is very valuable for its overarching themes that support the kind of research that I am hoping to do.

Wexler focuses primarily on practical strategies but writes, “art projects might begin with foundational sensory knowing, but the process quickly engages children in idea making. The manipulation of materials suggests the relationship between physicality and abstract symbolic ideas that evolve as they provoke memory and experience” (p.103). She gives nod to the idea that art is always more than the physical act involved with the process. She acknowledges that through the process of creating, individuals involve themselves in a thought process that speaks to their way of thinking about life. This sentiment is supported throughout the book with the words of others. A quote from Roger Cardinal sums it up well, “art making is nothing if not a journey towards fluency, and its articulations inform all meaning and understanding” (p. xvi).

In 2011 Alice Wexler wrote an article called “The siege of the cultural city is underway: Adolescents with disabilities make ‘art.’” The article reports about a specific program that she was a part of, in which the use of the creative process as a means of personal reflection and growth for children with disabilities was explored more thoroughly. Through the Arts 2-gether program (a program for students with developmental disabilities ages 12-19) the classroom evolved to become an art-making laboratory where first person narrative art making became central. This article follows the Arts 2-gether program in which graduate students fulfilling fieldwork requirements

worked with students with disabilities ages 12-19 in the art classroom. It explains how the process developed to be experimental for both the teachers and students where first person narrative art making became the central theme. Dialogue became an extremely valuable aspect of the program and teachers felt that they were being taught as much as they were teaching. This article uses interview and documentation in the form of pictures to gather data. “First person lived experiences of artists and authors with disabilities have captured the attention of K-12 educators who struggle to create parity among a diverse student body, as well as higher education educators who want to provide pre-service teachers tangible experiences with real children” (p. 54). “As the semester went on, we found that trust delivered the maximum benefit; happy children yielded enriched learning. By the end of the semester, the strain to understand, accommodate, perceive, and tolerate gave way to barrier-free experiences” (p.57). This article was an interesting case study that pertains to building resiliency through art in some very direct ways. It not only addresses the issue by looking at the needs of the students, but also gives testimony to the ability of pedagogy to affect the outcome of teachers’ sense of confidence and satisfaction. The introduction is very helpful in expanding bibliography sources that may speak directly to the research I am doing. One specific author who Wexler mentions is Doug Blandy. I continued to do research to discover if the additional sources this article offers me speak more directly towards building resiliency through art. I tried to find out if these sources will lead me to find an opposing point of view. One of the difficulties in obtaining information through literature has been that there does not seem to be a lot of direct opponents to these ideas. In fact, at this point, I have not found any.

Reading articles by art educator/researcher Doug Blandy brings my efforts back to square one. While Blandy has written extensively on art education issues, his biggest contribution to the field of educating students with disabilities has probably been his article “Guidelines for Teaching Art to Children and Youth Experiencing Significant Mental/Physical Challenges” (1988) co-written with authors Ernest Pancsofar and Tom Mockensturm. This was the article that Cramer, Coleman, Yuleong, Bell and Coles (2015) referenced as the beginning of the period in which they were accessing growth in the field of art education for students with special needs. In the article six guidelines are laid out for the use of appropriate art education for students with significant disabilities. The guidelines are: the use of age appropriate materials, incorporate the principle of partial participation, development of a cue hierarchy, analysis of current and subsequent environments, attention to multicultural issues in art education, and participation in the greater art community. This article was published in 1988. Without personal knowledge of how art teachers at the time addressed the needs of special education students, I was able to get a clearer picture by reading Blandy’s article “Conceptions of Disability: Toward a Sociopolitical Orientation to Disability for Art Education” (1991). In this article Blandy lays out the history of viewpoints towards educating disabled people and how the *"Americans with Disabilities Act"* of 1990 shifted those viewpoints and how that applied to art education. It is important to note that the article was published just one year prior to the approval of the act. Blandy suggests:

We now know that people experiencing disabilities will not be content with their artwork being perceived as "curious" or as a "genre" categorized by such designations as "outsider art," "mad," or "l' art brut." Such designations

emphasize disability rather than ability, dissimilarity rather than similarity. The categorical approach to disability symptomatic of a functional-limitations orientation and the impersonal labels associated with it are no longer viable and are counter-productive to the political agenda of those so labeled. As such, these categorizations can no longer enjoy indiscriminate use by art educators or be used to determine who is deserving of an art education and who is not. All children, youth, and adults, without exception, will be seen as deserving. In addition, environments can no longer be seen as fixed entities to which people must conform and adapt, but as flexible, dynamic, and adaptable (p.139).

Here Blandy clearly answers the question that I had not yet been able to do. The opposition to applying resilience theory to art education for children with severe disabilities does not come from a researcher with an opposing theory. The opposition to such pedagogy comes instead from the long history of discrimination against individuals with disabilities and the slow response of our culture to address their educational needs.

Lois Kagan, an artist living with disability due to a severe car accident that killed her family, wrote her doctoral dissertation “Bio- Aesthetic Adaptation: An Investigation of Visual Art Created by Artists with Physical Disabilities” (1997) which focused on artists who use adaptive methods to create their work. She chose artists whose work is conceived to be a part of the larger art world and not solely intended for therapeutic purposes. Kagan’s dissertation focuses on bio-aesthetics and thus contributes to the list of sources of practical ways to think about artists with physical disabilities. In her introduction, however, Kagan does give a first-hand account of difficulties faced by artist

with disabilities that would be difficult for an individual without disabilities to have otherwise noticed. She writes:

My disability, however, restricted my ability to pursue potential exhibitions. I discovered that carrying my heavy art portfolio for evaluation at fourth floor, walk up exhibition spaces, the first place unknown artists seek shows, was difficult due to my problems with balance, coordination and limited stamina. Although I no longer used a wheelchair, I began to realize that unknown disabled artists have limited access to first level of exhibition opportunities (p.vii).

Kagan describes one example of the unmet needs of artist with disabilities. I include this example to make the point that while adversity due to physical limitations is wide-spread, it is only one forms of challenges faced by individuals with severe physical disabilities. As Kagan herself is discovering the difficulties that severe physical disabilities can bring, she is herself, slow to elaborate on any emotional content attached to them. While it can be presumed that limited access may have left her with a sense of frustration or injustice, and that the loss of her family due to a car crash that she narrowly survived was a traumatic experience, she only hints at the hand art had in her healing process, writing:

As Professor Ecker's student in a number of aesthetic research courses, his teaching helped me learn to compensate for my cognitive losses, and served as a source of remediation for my reasoning and reflective capacities.

While working on required doctoral courses I was also creating art. (p.vi)

An easy way to explain this lack of reported emotion is by recognizing that Kagan was focused on bio-aesthetic adaptation and may have not wanted to delve too deeply

into any sentiments that may lead one to question her ability to act as an authority on the subject matter she was investigating. My critical thinking leads me to see this as more evidence of the hesitancy of our culture to look beyond the basic functional needs of individuals with severe physical disabilities.

Severe Physical Disability, Orthopedic Impairment and Cerebral Palsy Explained

The term severe physical disability is merely a descriptive term, which refers to the population that I am researching. It is the broadest term as it not a legal term or a diagnosis. Orthopedic Impairment is a classification used to determine disability, specifically as it applies to the need for special education services. Orthopedic Impairment can be defined as “a severe orthopedic impairment that adversely affects a child’s educational performance.” “IDEA specifies that this term “includes impairments caused by a congenital anomaly [birth defects], impairments caused by disease (e.g., poliomyelitis, bone tuberculosis), and impairments from other causes (e.g., cerebral palsy, amputations, and fractures or burns that cause contractures)” (Special Education Guide, 2016). Orthopedic impairments are for the most part self-explanatory, however, the Medline Plus Medical Dictionary explains “burns that cause contractures” further. A “contracture” is “a permanent shortening (as of muscle, tendon, or scar tissue) producing deformity or distortion.” To diagnose an orthopedic impairment an evaluation is required that determines the academic performance, by observing them in an educational setting (Special Education Guide, 2016, Merriam-Webster Medline Plus Medical Dictionary, 2016). The condition should last more than 60 days in order to be considered an orthopedic impairment. The three main categories of orthopedic impairment are

neuromotor impairments, musculoskeletal disorders and degenerative diseases (Education.com, 2009).

A good summary of the situation children with orthopedic impairments find in the educational setting is described at

<http://www.education.com/reference/article/orthopedic-impairments/> (2009):

Some students with physical disabilities may lack common experiences and knowledge or common places, items, and activities as compared with general education students. This is due to a lack of mobility and, if their condition has existed since birth, the lack of typical childhood play and exploration. These students' social interactions often are limited because of limited motor, self-help, and self-care skills. Sometimes standard instructional materials include mention of objects and experiences or assume comprehension that is beyond the experience and background of the child with an orthopedic impairment. Children with orthopedic impairments may have pain and discomfort, may sleep poorly and therefore be fatigued in class, and may be on medications. They also may miss school more frequently than other students because of their medical conditions.”

There are than 50 different diseases and disorders associated with orthopedic impairments. Among the most common are spina bifida, scoliosis, cerebral palsy, and muscular dystrophy (Project Ideal, 2009).

Cerebral Palsy can be defined as “several “non-progressive” disorders of posture or voluntary movement caused by damage to the nervous system before or during birth or the first few years of life” (Project Ideal, 2013). Information about the types of cerebral palsy can be found at <http://kidshealth.org/en/parents/cerebral-palsy.html> (2016):

The three types of CP are:

1. spastic cerebral palsy — causes stiffness and movement difficulties
2. athetoid cerebral palsy — leads to involuntary and uncontrolled movements
3. ataxic cerebral palsy — causes a problem with balance and depth perception

Individuals with cerebral palsy may have difficulty swallowing, breathing, talking and controlling their bladder and bowels. Cerebral Palsy is a specific medical diagnosis and is considered non-progressive because symptoms do not get worse over time. This is the official medical assessment; however, most individuals will have worsened conditions over time due to lack of physical mobility that leads to muscle deterioration. Nutritional deficiencies, poor circulation and compromised immune systems can also cause related health issues (Kids Health at Nemours, 2016).

All the students in my study will be characterized as having severe physical disabilities. It is safe to say that most of them will qualify for special education under the orthopedic impairment category, although some may have qualified under another category such as multiple disabilities. The school that I am conducting research in is geared towards serving children with cerebral palsy and other medical conditions that present similar educational needs. Most, but not all of the students will likely have a diagnosis of cerebral palsy (see Figure 2). The specific type will vary, but all have been considered severe enough to require a specialized school to best serve their needs.

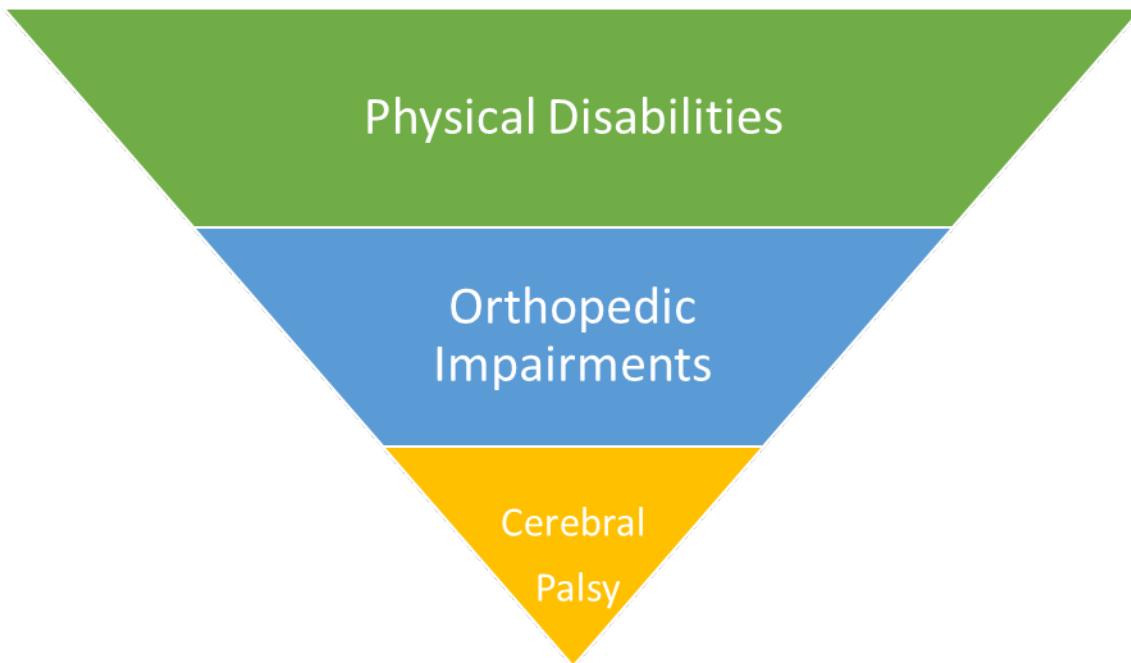


Figure 2. Shows the relationship between physical disabilities, orthopedic impairment and cerebral palsy.

Summary

While research directly speaking to the relationship between students with severe physical disabilities and fostering resilience through art is unavailable, I hope to make it so soon. At the moment thanks to researchers such as Donalyn Heise (2014), Alice Wexler (2009) and Sophie Lucido Johnson (2013) and Lisa Kay (2016) there are enough clear examples of how fostering resilience can be used in art education to support students, encouraging art-making, and advance teacher confidence and satisfaction. The unfortunate gap between trauma research and children with severe physical disabilities is likely explained by the fact that most research done with patients with severe physical disabilities has been conducted by physical therapists whose primary concern is mobility. This gap, however, is easily filled in by looking at the literature on both sides of the gap and connecting the findings together.

Chapter III: Methodology

Design of the Study

Setting. HMS school for children with cerebral palsy is an old stone building that has had many modifications done to it over the years. The building is very wheelchair accessible. The two main floors are used for students and are connected through two elevators and several exterior ramps. The building is generally bright and full of artwork. There is a small music room and a small art room, and a large dining room and assembly room. Outside the building there is a small courtyard and a larger back yard with wheelchair swings and a walking path. Other features of the building include a sensory room, a wheelchair accessible kitchen that students can use for cooking, a small residence hall, chapel, which has been converted to a student center, and office space on the third floor. There is a friendly, familial feeling in the building and students refer to teachers and staff by their first names.

Participants. The participants will be students ranging 7-21 in age. They will all be students who have some form of severe physical disability and are confined to a wheelchair. Some of the students I will have previous relationship with because I have previously worked at HMS as a teacher assistant, and some of them may be new students that I have not yet had the opportunity to get to know. Students may have little or no verbal communication and require adaptive equipment to engage in the art making process. All students receive various therapies throughout the week including physical therapy, occupational therapy, speech therapy, dance movement therapy and various other specialized instruction. Students need varying levels of a personal care support

including feeding and toileting assistance. Class size at HMS usually ranges between five to ten students. Most students require some form of medical care throughout the day and several students come to school with a nurse. Maintaining a consistent group of students can be challenging but is typically doable. I am requesting a minimum of five participants in order to run the art club.

Researcher role. I will be both a participant and non-participant. I will take baseline data to gain an understanding of how much resilience building factors exist in the students' normal art room environment and then adjust my art club according to the results. My intention in doing this is to be able to increase resilience-building factors both through the topic of art club classes and through intentional inclusion of such elements as encouragement, listening, and humor.

Research procedures. I will be getting participant participation and site participation forms signed to proceed with the art club and research. I will thoroughly explain the expectations to participants as clearly as possible. I will be getting approval from Moore College of Art and Design as well as HMS School for Children with Cerebral Palsy to proceed. I will also be receiving individual approval. Once all approvals are met, art club sessions will proceed for 8-10 weeks during which time I will be conducting art club lessons and collecting research.

Ethical considerations. The research is designed to focus proactively on increasing the factors that protect against trauma. I will **at no time** be asking students to recount traumatic events. I will be seeking the input of mental health professionals whenever I have personal questions on boundaries, and I will be passing any concerns or issues

beyond my capabilities as an art educator on to the school social worker. Participant risk will be minimal and not accede any typical art-making activity. Participants are free to withdraw from the study without repercussions. Data will be kept in a locked box in my home. Electronic data will be password protected. Video recordings will be destroyed after the completion of the thesis.

Research Methods

Type of study. For this study, I will be using arts-based action research. As both researcher, and educator I will be using a bounded instrumental case study to conduct my research. Quantitative research could be valuable to studying resilience theory applied to art education for children with severe physical disabilities. I will in fact be using quantitative methods to gather non-participant base-line data, and may apply it to access my progress in increasing the elements of the art club classes that increase the factors that protect against trauma. I only have a short time in which to conduct my study, however, and for those reasons, quantitative research is not suitable for the bulk of my study.

Qualitative research is suitable for the bulk of my study. It will allow me to gather, interviews, surveys, artwork and personal narratives of the ways in which applying resilience theory to art education for children with severe physical disabilities is impacting the students' experiences both in and out of the art room. Using multiple methods of data collection will allow for a broader view of "if", "how", and "why" this pedagogy is suitable.

Methods to be used. I have witnessed the problem in the past, I recognize it as a current issue and I am interested in helping resolve the problem so that it does not continue in such regularity in the future. To properly gain insight on the history of this problem I will research it through literature. I will do pre-, non-participant data studies to gain perspective on how much or little this problem currently factors into the art education program of the students I will be doing research with. I will conduct interviews with teachers, caregivers and students, I will conduct surveys and I will research methods of data collection in the art room to gain understanding of how to effectively reduce the problem.

Surveys will be important to my case study because they will allow for a wider range of participants. They will be given to teachers and caregivers and will help to gage a broader understanding of how participants are being affected by the art club. Most of the participants will have difficulty communicating in depth and may have little experience answering interview or survey questions. It is important to give credence to the teachers and caregivers who spend so much of their time and energy seeking to support the student participants.

Interviews will be essential to my study for several reasons. First, it is important to give the participants of my study as much of a “voice” as possible. Surveys may limit their ability to accurately describe their feelings. By conducting interviews, it will help them express themselves to the best of their abilities and in some cases, it will allow for translation of personal terms that may be unfamiliar to the public. Interviews will also be essential because they will increase the level of relatability to the research. Hearing

personal testimony will increase the reader's interest level and ability to understand the problem beyond facts and figures. The interviews will be videotaped and for students they will be conducted with the assistance of someone familiar with their communication process.

Pre- data will also be important as it will serve as a comparison and baseline from which I will need to increase the amount of material related to the factors that protect from trauma. A data sheet can be found in Appendix A.

Data Collection

Context of the study. Students will participate in the study on a volunteer basis. While the opportunity will be given for them to share personal ideas and emotions that may be difficult, there will be no pressure or expectation that they do so. The goal of the art club will be to facilitate a safe, enjoyable environment in which students feel supported and comfortable. All data will be collected as a part of the natural process of the activity in the most stress-free manner possible.

Literature sources. My data collection methods have been pulled from various sources and altered to meet the needs of my study. To gather baseline data, I have combined data collection worksheets with the knowledge that I have gathered from years of collecting Applied Behavior Analysis data to create observable behavior timesheet (Bicard, S.C, Bicard D.F. and the Iris Center, 2012). I have also gathered resources from *Art-Centered Education and Therapy for Children with Disabilities* by Frances E. Anderson (1994). To provide students with ample forms of reflecting and expressing their artistic growth I have adapted several graphic organizers and self-assessment forms

identified via my research online (K5 Computer Lab Technology Lesson Plans, 2015).

The resources have all been revised both for content and accessibility. I am working with ideas taken from Donayln Heise (2014) and other's research in applying resilience theory to art and designing data collection methods including surveys and interviews around the abilities of the participants to respond.

Pre- non-participant data protocol. I will be collecting data pre- art club to collect a baseline of attributes encouraging the factors that protect against adversity from which to increase. Data will be taken on two 45-minute periods of art class both before the study begins. Data will be presented in bar-graph form. It is not uncommon for visitors to observe students at HMS, however, students and staff will be notified that I am only observing and attempting to engage in as little interaction as possible. The data collection form can be found in Appendix A.

Interview protocol. Student interviewees will be videotaped with the company of someone familiar with the students' personal mode of communication. Interviews will be approximately 10-20 minutes long. They will be conducted at the convenience of the interviewee and all responses are completely voluntary. Questions will be specified to the individual and revolve around the factors that protect against adversity. They will be semi-structured. Interviews will allow the students to express their ideas and emotions in the mode that is most comfortable to them. They may respond using assistive technology devices such as big macs, communication devices, eye gaze and head nodding. Communication devices may be accessed through eye gaze, finger touch or adaptive switches. The students' most comfortable form of communication will be used. Teachers or aids may be present to assist with communication needs. Non-student

interviews will follow a similar format, times and participants will be chosen based on involvement level and convenience of the interviewee. The importance of non-student interviews will be to give an observer point of view.

Standard interview questions for students will be:

Spark- Question (Q): How are you feeling today?

Researcher Response (RR): Today we are going to talk about our art club. I am excited to hear your opinion on it.

Q: Are you ready to talk about art club?

RR: We are going to talk about how choice-making, positive attitudes, humor, **and** attaching meaning are a part of our art club (Heise, 2011; Benard, 1991; Bosworth & Walz, 2005; Krovetz, 1999).

Q: Do you think any of these have an important role in our club?

Q: Which ones?

Q: Can you think of an example?

RR: Thank you for your response. Now we are going to talk about affirming strengths, art-historical references, and listening. (Heise, 2011; Benard, 1991; Bosworth & Walz, 2005; Krovetz, 1999).

Q: Do you think any of these have an important role in our art club?

Q: Which ones?

Q: Can you think of an example?

RR: Thank you for your response. I have one last question for you.

Q: Do you enjoy art club?

These questions may be altered based on the student's ability to answer. The questions are aimed at gauging participants' understanding of the factors that protect against trauma and giving them a chance to express how any of them have been increased through the art club. Some interviews may be conducted in yes or no form due to the student's communication ability level. Yes and no questions, while typically not ideal in an interview may be some students' strongest ability to communicate.

Standard interview questions for teachers or caregivers:

Spark- Q: How are you today?

RR: Today I will be interviewing you about how you noticed students' responses to our art club.

Q: How have you seen *Student Participant's Name* conversation or behavior affected by art club?

Q: Do you feel art club has had a positive effect on *Student Participant's Name*?

Q: Can you give an example?

Q: Have you seen an increase in *Student Participants Name's* creativity, positive relationships, humor, independence, positive view of personal future, flexibility, joy of learning, self-motivation, competence or mastery, self-worth, or

perseverance since they have been a part of the art club (Heise, 2011; Benard, 1991; Bosworth & Walz, 2005; Krovetz, 1999)?

Q: Could you give an example of how you've witnessed this behavior?

Survey protocol. Surveys will be categorized by teacher, parent or caregiver.

They will include both multiple choice and short answer questions. They will be given at both the beginning and end of the program. Students will complete surveys with assistance, however, data will also be collected on the person assisting. They are completely voluntary and should take approximately two-ten minutes to fill out. Data collected will be presented in bar-graph form. In addition, students will be asked to fill out self-assessments before and after club activities. The format of the assessments will be based on individual students' ability to respond.

Survey questions will be focused on accessing how much participants experience “creativity, positive relationships, humor, independence, positive view of personal future, flexibility, joy of learning, self-motivation, competence or mastery, self-worth, or perseverance” (Heise, 2011; Benard, 1991; Bosworth & Walz, 2005; Krovetz, 1999) within the art club context and their level of enjoyment in the art making process. They will also ask about how they view the art club’s ability to: *“Establish a classroom culture of caring”*; *“Help students feel safe and develop trusting relationships”*; *“Provide boundaries and structure”*; *“Offer choices within the lesson plan and/or curriculum”*; *“Infuse instructional units/lesson plans with contemporary artists”*; *“Practice empathy”*; *“Use art for self-care”*; *“Continuing education or professional development”*; and *“Seek out art therapists as collaborators”* (Kay, 2016, pp.29-30). For teachers and caregivers,

the surveys will be more extensive. It will include questions of students' social competence, problem-solving skills, autonomy, and a sense of purpose and future (Henderson, Bernard, & Sharp-Light, 2007; Krovetz, 2007). This information is crucial to support the idea that these protective factors are (or are not) helping the student participants to internalize attributes of resilient individuals. For student participants, surveys will be limited to four questions at a time. They will be asked to answer questions, yes, no, or not sure. Each answer will have a correlating emoji. If a student requires assistance to fill out a survey, that will be recorded on the survey to be considered during data analysis and note in the findings. Survey examples can be found in Appendix A.

Artwork/process observation protocol. Art class lessons and projects will be thematic designed by loosely using the protected factors "creativity, positive relationships, humor, independence, positive view of personal future, flexibility, joy of learning, self-motivation, competence or mastery, self-worth, and perseverance" (Heise, 2011; Benard, 1991; Bosworth & Walz, 2005; Krovetz, 1999) as themes. Materials will be varied and painting, photography, computer art, drawing, and collage will all be incorporated into the projects. Students will be invited to gather in a common space, however, exceptions may be made to accommodate students' needs. Data will be collected on the finished artwork and process of each student within two hours of the club activity. Comments will be recorded on an art work/ process data form. The general plan for the art club follows:

Unit Overview

Week 1: Self-Identifying Selfies- *Fostering Self Worth*

Week 2: What I Like Collages- *Fostering Independence and Self-Motivation*

Week 3: What I Dislike Cyanotypes- *Fostering Competence and Perseverance*

Week 4: When I Grow Up Paintings- *Fostering a positive view of personal future*

Week 5: Funny Face Masks- *Fostering creativity and humor*

Week 6: What I Want to Learn More About Collages- *Fostering the joy of learning*

Week 7: Who I Love Wax- Resists- *Fostering positive relationships*

Week 8: Collaborative Mixed Media Piece- *Fostering flexibility*

A sample lesson plan can be found in Appendix A.

Limitations

I am limiting my pre- non-participant data collection to two, forty-five minute sessions. This decision was made based both on the desire not to limit the data to a one-time collection and not to over involve myself with this aspect of data collection. The main purpose of this data collection is to give myself a baseline to serve as a starting point for my curriculum. Having an idea of how much the factors that protect against diversity already exist in participants pre-existing art education will help me formulate a plan of how I can increase them in the art club setting.

There are several other natural limitations of the study. Students' communication limitations will be an area that while given careful attention and support, will be

impossible to eliminate. The students that I will be working with will also have various other physical and self-care needs and while attention will also be given to try to minimize interference from these factors, it is impossible to limit them altogether and may conflict with providing a safe and comfortable environment for students, which is a crucial element to the study. Finally, a natural limitation of the study is that it is based on personal opinion and emotional content. These factors are hard to nail down and while the attempt will be made to study and record data in the most non-biased way possible, the nature of the material studied is personal and fluctuating.

The final limitations of the study will be time, place and finances. I am doing this study within the time allotted to me through my Master's degree program. The likely run of the study will be eight weeks. For the suitability of the participants I will be limiting the hours of the club to four to six hours per week. Finances will be minimal, kept so intentionally due to lack of funding.

Data Analysis

Organization of data. I will first organize my data into categories initially simply by type of data collection, then by collection date. The information will be broken into smaller categories for the ease of analyzing. Next, the data will be read to look for emerging themes and relativity to the thesis. Specific themes that I will be looking for are evidence of self-worth, positive outlook on the future, competency, creativity, humor and using art as an outlet for expressing personal problems or celebrating successes. While these are the specific themes that I will be focused on, I will also be looking for any unexpected themes that may emerge.

Coding of data. After themes are firmly established I will color and label data. I will then be getting a second opinion from one of my fellow graduate students. Once their analysis is complete we will compare and contrast ideas and I will make adjustments based on that conversation. Finally, I will gather insights, patterns and exceptions and report them as my findings.

Methods of analysis. Once themes initial and relativity are established data will be read over again and categories will be further refined. I will be analyzing pre- and post- data quantitatively to find out the frequency of certain themes in the context of the participant's typical art class. The majority of my data will be qualitative and also the information that I will be using as the base of my thesis findings. In order to analysis the data I will be using Inductive Analysis Process.

Timeline

I will begin seeking site permission as soon as possible. An initial letter of inquiry has already been sent out and the school has informed me that they are interested, however, the consideration process may be longer than I had anticipated. I am also aware that they have a two-week winter break beginning in mid-December. Student, parent, teacher and staff permissions will be sought in the beginning of January with the deadline of early February. Literature review and methodology corrections will continue until February. My research will begin with non-participant baseline data collection for which I will observe two forty-five-minute art classes. I will also have participants fill out an initial survey about how the factors that protect from trauma are currently active in their art education experience. Art club "classes" will take place between February and

May during which time I will be collecting self-assessments, artwork, and video recordings. In mid-April interviews and parent, teacher and staff surveys will be collected to assess progress. In late April, post- non-participant data will be collected as well as student after surveys. May and June will be used to analysis data and write chapter 5 of my thesis and work on any corrections that are still needed. Summer 2017 will be dedicated to preparing for the final presentation.

Month	Process	Steps to Accomplish
December	Proposal Hearing	Complete AEGR618 course requirements and participate in proposal hearing on Dec 10
	Gain IRB Approval	Submit full proposal as requested no later than December 14
January	Begin seeking site approvals	As soon as IRB is granted (or sooner with instructor approval) contact site with initial letter of inquiry
	Seek participant permissions	Working with site, distribute and collect IRB approved permissions
	Prepare to launch field study	Begin Fieldwork course with Jo Viviani to ensure readiness to enter field
	Schedule art club sessions	Talk to education supervisor and or/ recreation supervisor about students' schedules

February	Begin art club sessions	Conduct “lessons” with students, record and collect data
March	Continue art club sessions	Conduct “lessons” with students, record and collect data
April	Revise chapters 1-3	Get feedback from readers
	Write chapter 4	Graph and analyze data
	Complete data collection	Finish interviews and surveys
May	Write chapter 5	Continue analysis and organize data and present in written form
June	Revise all chapters	Read over entire thesis and look for any final revisions needed
July	Prepare for final presentation	
August	Present final presentation	

Chapter IV: Results of Data Collection and Findings

Introduction to the Data Collection Process

HMS arranged a class of six students to take part in the art club that I conducted my research with. The class consisted of five female students and one male student, however, one student was absent for most of the art club sessions and only able to participate minimally towards the end of the two months. For the purposes of data collection, we can say that the art club consisted of five students, ages 12- 17. All the participants are non-ambulatory and get around with the use of a wheelchair. For the purposes of this thesis, we will refer to the students by the pseudonyms James, Molly, Heather, Kari and Sadie. The student who only participated minimally will be referred to as Samantha.

James is a boy who drives a power wheelchair independently. He was adopted into a large family and has been attending HMS for several years now as a day student. He enjoys many age typical activities such as playing outside, watching You-Tube videos and playing video games. He is able to speak using his voice but has a difficult time pronouncing his words. The main way he communicates is using an assistive device that he accesses through touch. I was familiar with James prior to the art club because he had befriended my son who had spent time at HMS as a junior volunteer. My sense of James before beginning the study is that he is a cognitively typical boy who lacks many of the typical experiences he would like to have due to physical limitations. It should be noted, however, that I have always observed him to have a positive attitude towards life and interactions with others.

Molly is a student who also drives a power wheelchair. Molly drives independently but needs more supervision to make sure she maintains safety. She is cognitively atypical for her age; however, she enjoys many age appropriate activities such as dancing and shows a particularly strong interest in popular culture. Molly is a day student at HMS. Although I was familiar with Molly before the study, I have never worked directly with her for any considerable length of time, and had not observed her academic performance prior to this study.

Heather is a student who uses a manual wheelchair. This means she is unable to transport herself and relies on others to move her around. She has limited hand movement and no verbal communication. Heather has an assisted speech device that scans through words that she can hit with a switch placed at the side of her head. She has difficulty using her device and often requires assistance. Her most effective form of communication is looking up and often smiling for “yes,” and looking down and turning sided to side slowly for “no”. Heather cannot speak but she will often make high-pitched squeals to express happiness or excitement. Heather is a residential student at HMS who goes home to visit her family on the weekend. I was familiar with Heather as an HMS student before this study but had not personally worked with her.

Kari is a student who drives a power wheelchair and uses her voice to speak. I have observed her academic performance in the past and found her to have a stronger ability to comprehend and respond to information than I have noticed in many of her classmates. In past experiences with Kari I had observed her boisterously interacting with staff around the school. In my initial art club interactions with Kari I found her to be much more quiet and hesitant to respond.

Her common response to me was “I don’t know” or “Maybe.” Her interactions with fellow students seemed limited and she appeared easily distracted. Kari is a residential student who only goes home on breaks.

Sadie drives a power wheelchair but requires supervision. She can use her voice to say a few words but relies on her assistive technology device to speak. She accesses her device through touch. Sadie is very friendly and it does not take long to notice her sense of humor. I interacted with Sadie before the study as her teacher assistant for a month and a half during a summer camp which was more recreation based than the typical school year. Sadie is a day student at HMS. See Fig. 3.

I began my data collection by observing a typical art class at HMS to get a base line for how often the factors that help build resiliency were present. I had some previous background knowledge of all the student participants and was able to quickly jump into the art club and data collection process. I began by explaining the club procedures to the students and having them vote on a name. Once “The Awesome Art Club” was officially established, we began our first project. From that point, we completed one project during two 45-minute periods per week. I took pictures and recorded observation data for each session. If any interaction was of special interest, I took time to record at the time it was being said. At the end of the project, students completed participant surveys. I also sent out parent/teacher/caregiver surveys, which were returned at the participant’s convenience. At the end of the two-months I conducted interviews. Responses to student interviews quickly proved inadequate to the desired data collection.

Figure 3. This table shows background information on each of the art club participants.

Student	Mobility	Prior Relationship	Communication	Type of Stay
James	Power-independent	Good prior relationship	Some verbal but mainly on device	Day-student
Molly	Power-independent with some supervision	Prior knowledge of with some interaction	Verbal	Day-student
Heather	Manual	Prior knowledge of with some interaction	Non-verbal, some communication device, looks up or down for yes/no	Residential- goes home on weekends
Kari	Power-independent	Prior knowledge of with some interaction	Verbal	Residential- goes home only on breaks
Sadie	Power-supervision	Prior experience with as short-term teacher assistant	Limited verbal, mainly communication device	Day-student
Samantha	Power-with supervision	Prior knowledge of with some interaction	Non-verbal, mainly communication device, looks up or down for yes/no	Day-student

The interview format was re-written to function more as a survey that provided students with statements and cards with which to respond: almost always, sometimes or almost never. This format showed to be much more successful at getting to the desired information. A post-art club interview was also conducted with the social worker that assisted with the art club.

Lesson Plans and Interview Summaries

Lesson plans.

Week One: Self-Identifying Selfies

Standard: Fostering Self Worth (Heise, 2011; Benard, 1991; Bosworth & Walz, 2005; Krovetz, 1999)

Objective: Through the use of mixed media (computer, Photo Booth program, switches, printer, paper, copies of words and images, switch adapted scissors, glue, adapted brushes, Mod Podge) students will create self-identifying collages in order to use art as means to develop self-worth.

The first project we worked on was Self-Identifying Selfies. Students were set up to take selfies using Photo-Booth and adaptive switches on the computer. They chose from different filters and several shots and selected the one they felt best represented themselves. After printing the selfies, the students were asked to come up with words or images that helped to further represent themselves. Those images were then printed, cut using adaptive scissors and glued on to the background of their selfie.



Figure 4. Molly's Self-Identifying Selfie

Week Two: What I Like Collages

Standards: Fostering independence and self-motivation (Heise, 2011; Benard, 1991; Bosworth & Walz, 2005; Krovetz, 1999)

Objective: Through the use of mixed media (paper, 3-D pieces, switches, printer, paper, copies of words and images, switch adapted scissors, glue, adapted brushes, Mod Podge) students will create “what I like” collages in order to use art as means to develop independence and self-motivation.

In the second week of the “Awesome” Art Club, students created collages based on what they like. Students were asked to come up with a list of things they enjoyed and we searched for images of them on the Internet. They then constructed collages by first choosing a background and gluing it to their paper. Once a background had been selected and glued, students cut and pasted images they chose from the Internet and magazines onto it.



Figure 5 and 6. Heather (left) and Sadie's (right) What I Like Collages.

Week Three: What I Don't Like Cyanotypes

Standards: Fostering competence and perseverance (Heise, 2011; Benard, 1991; Bosworth & Walz, 2005; Krovetz, 1999)

Objective: Through the use of sun paper, and transparencies and computer images students will create “what I don’t like” cyanotypes in order to use art as means to foster competence and perseverance by creating art from unpleasant subject matter.

During week three, students created cyanotypes or sun prints based on things that they do not like. Students were asked to choose images from the Internet of things that they found to be unpleasant. Once the images were chosen, they were printed on transparency film. During the second session, we took the club outside to make sun prints using the transparency images. Once the exposures were complete, the class went back inside and students were shown how the water would develop their prints.

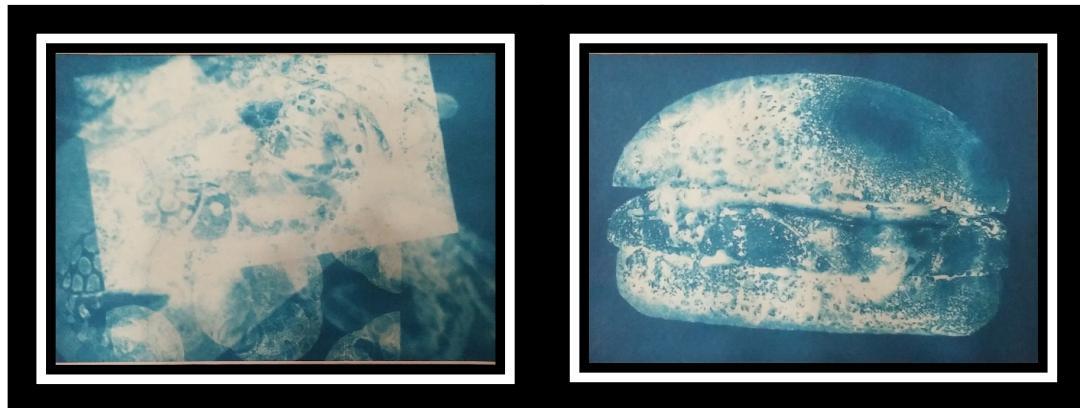


Figure 7 and 8: Cyanotypes made by Kari (left) and Heather (right).

Week Four: When I Grow Up Paintings

Standard: Fostering a positive sense of personal future (Heise, 2011; Benard, 1991; Bosworth & Walz, 2005; Krovetz, 1999)

Objective: Through the use of paint, brushes and canvas students will create “when I grow up” paintings in order to use art as means to foster a positive sense of personal future.

In our fourth week of art club students made paintings about what they would like to do when they grow up. For some of the students the answer was instantaneous, for others we discussed possibilities based on what former HMS graduates were now doing. The students were familiar with the practice of painting through their standard art class, which meets once a week. Variety was added to the process by offering students the option of using paint markers and solid tempera sticks.



Figure 9: This detail shot of Sadie’s When I Grow Up Painting shows her depiction of herself fighting the fire and the fire truck. She used paint markers to create the image.

Week Five: Funny Face Masks

Standards: Fostering a creativity and a sense of humor (Heise, 2011; Benard, 1991; Bosworth & Walz, 2005; Krovetz, 1999)

Objective: Through the use of pressed paper masks, paint, glue, and 3-D odds and ends, students will create “funny” face masks in order to use art as means to foster a sense of humor and creativity.

In week five of the “Awesome” Art Club students decorated pressed paper facemasks. The idea was to make the mask appear as funny as possible. Students glued various items such as fake flowers, pipe cleaners, yarn, and rhinestones to their masks after having drawn or painted on them. Once everyone had completed their mask, students were shown pictures of themselves wearing it.



Figure 10: The members of the “Awesome” Art Club posing in their Funny Face Masks.

Week Six: What I Want to Learn More About Collages

Standard: Fostering the joy of learning (Heise, 2011; Benard, 1991; Bosworth & Walz, 2005; Krovetz, 1999)

Objective: Through the use of scissors, glue and computer and magazine images students will create “what I want to know more about” collages in order to use art as means to foster the joy of learning.

Our week six project was another collage. Collage provides a way for students without the necessary motor skills to draw representational images, to use them in their artwork. For this project students were given a large black foam-core board on to which to arrange their collage. They were asked to research and select images and written information from the internet to transform into a piece of original artwork. Students were again given the opportunity to use assistive technology to cut and glue. They were also given the opportunity to add on to the collage with paint markers or solid tempera. Only one of the students chose to do so.

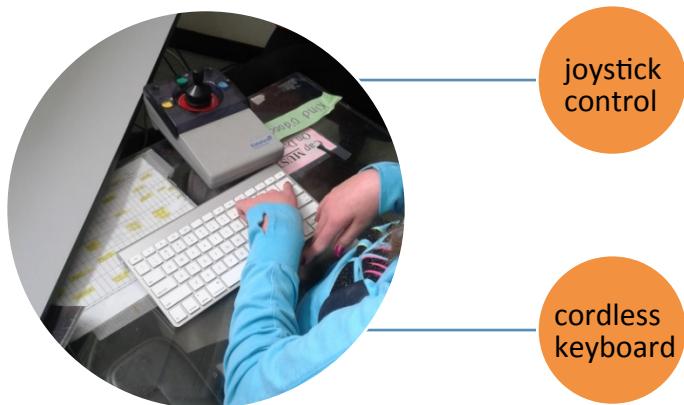


Figure 11: 3/18/17 Kari uses a joystick and cordless keyboard to access the Internet to research Taylor Swift.

Week Seven: Who I Love Wax Resists

Standard: Fostering positive relationships (Heise, 2011; Benard, 1991; Bosworth & Walz, 2005; Krovetz, 1999)

Objective: Through the use of oil pastels and liquid watercolor, students will create “who I love” wax resists in order to learn how to use art making as a way to foster positive relationships.

Week seven was cut short due to a snow day. Students were asked to pick a person they love to inspire their artwork and give their artwork to. Students were given oil pastels rather than crayons because the softness and bright colors of the oil pastels made it easier for the students to apply. The slightly larger thickness also made them easier to grasp. The students were given liquid watercolor to avoid the mixing component that would have been difficult for the students to handle. I put the watercolor in two-ounce baby bottles that allowed students a wider area for gripping. The hope was also to make the process more independent and less of a mess.



Figure 12 and 13. 3/25/17 These are the materials we used for the wax resists. On the right a student experiments with the baby bottles to create a spray effect.

Week Eight: Class Collage

Standard: Fostering flexibility (Heise, 2011; Benard, 1991; Bosworth & Walz, 2005; Krovetz, 1999)

Objective: Through the use of paper, glue and scissors, students will create a collaborative collage that incorporates choices from all members of the art club in order to foster flexibility through art making.

For the final art club project, students were asked to create a collaborative piece. The original plan was for the piece to be a mixed-media collage. I decided towards the middle of the two months that I wanted to ask for student input on what kind of artwork they would like to collaborate on. The response was unanimous that they wanted to make a collage. To create the collage, we proceeded in a similar way as we had for the other

collages students had created. However, this time the students had only one piece of paper and were asked to consider and respect the input of their peer collaborators.

Interviews. After the eight weeks of the “Awesome” Art Club were complete, students we interviewed on an at will basis. Interviews were video recorded. They took place in a quiet corner of the classroom with the teacher and assistant nearby. Initial results of the student interviews quickly proved to be deficient in gaining the information desired. While the participants were excited to be interviewed, they answered in short, often-contradictory responses, and had a very short tolerance when it came to length. The interview format was then adapted to serve as an interactive survey. Students were given statements and were asked to respond to the accuracy of them with cards saying, “Almost Always,” “Sometimes,” or “Almost Never.” These interviews were also video-recorded in a quiet corner of the classroom with the teacher and assistant nearby. This format gave much clearer responses and students appeared more competent and sure of their responses.

In addition to student interviews, the social worker who assisted with the “Awesome” Art Club was also interviewed post-art club. She was asked to provide her input on the effectiveness of the art club to promote resilience fostering characteristics; the prevalence of trauma factors in the students, and advice for non-therapeutic educators who feel it necessary to provide trauma support to their population of students.

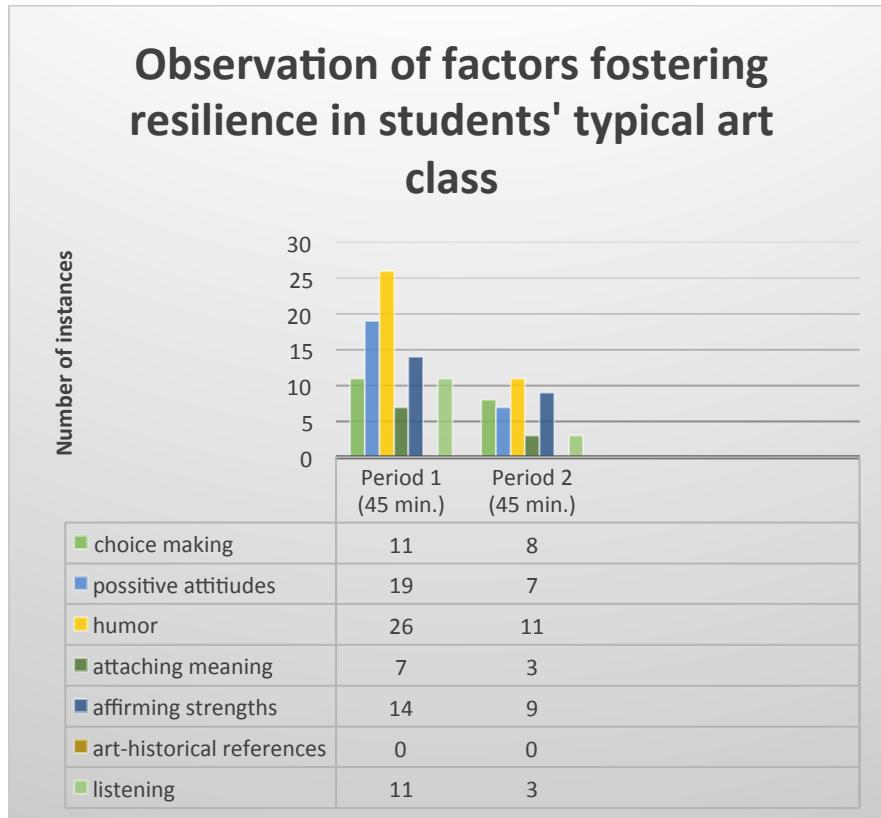
Observations and Assessments

Within two hours of the art club session, observation data on students’ process and artwork was recorded. Often, conversational responses that did not seem to fit in any

specific category but had relevance were recorded word for word on the spot. Students were asked how they were feeling at the beginning and end of each session, both as an emotional check-in, and as a way to track the effectiveness of the art club in providing positive feedback and emotional support to the students. Students' artwork was not assessed in a formal manner, but instead students were asked to share how they felt about their work, what was their favorite part of the process, and why. At the end of each project, students also completed participant surveys to gage the perceived presence of humor, creativity, flexibility and perseverance in that week's process. The students were limited to those four factors simply because of attention span. The other factors are addressed in the interviews.

Teachers, parents and caregivers were asked to fill out an optional survey. This survey was used to access where individuals in student supporting or caretaking roles felt the factors that foster resilience were and were not evident in the student's current art education, how important they perceived those factors to be to the student's development, and any other information they wanted to offer about the connection between art education and the students resilience from stress and trauma factors.

Data Presentation and Documentation



*Figure 14. Shows the instances of resiliency building factors in the student's typical art class. **Choice-making:** As defined by a student making a personal decision that will affect the outcome of their artwork; **Positive attitudes:** As defined by anyone in the environment that comments or gestures in a positive way; **Humor:** Any event of laughter or smiling because of a comic event; **Attaching meaning:** Any verbal attempt to refer to significance of the artwork beyond the present process; **Affirming strengths:** Any verbal or nonverbal attempt at acknowledging a student's abilities; **Art-historical references:** Any verbal or visual attempt to relate the artwork being created to a historically relevant source; **Listening:** Defined by a staff or teacher's motion to give a student silent attention for 15 seconds or longer followed by a response of acknowledgement.*

Surveys.

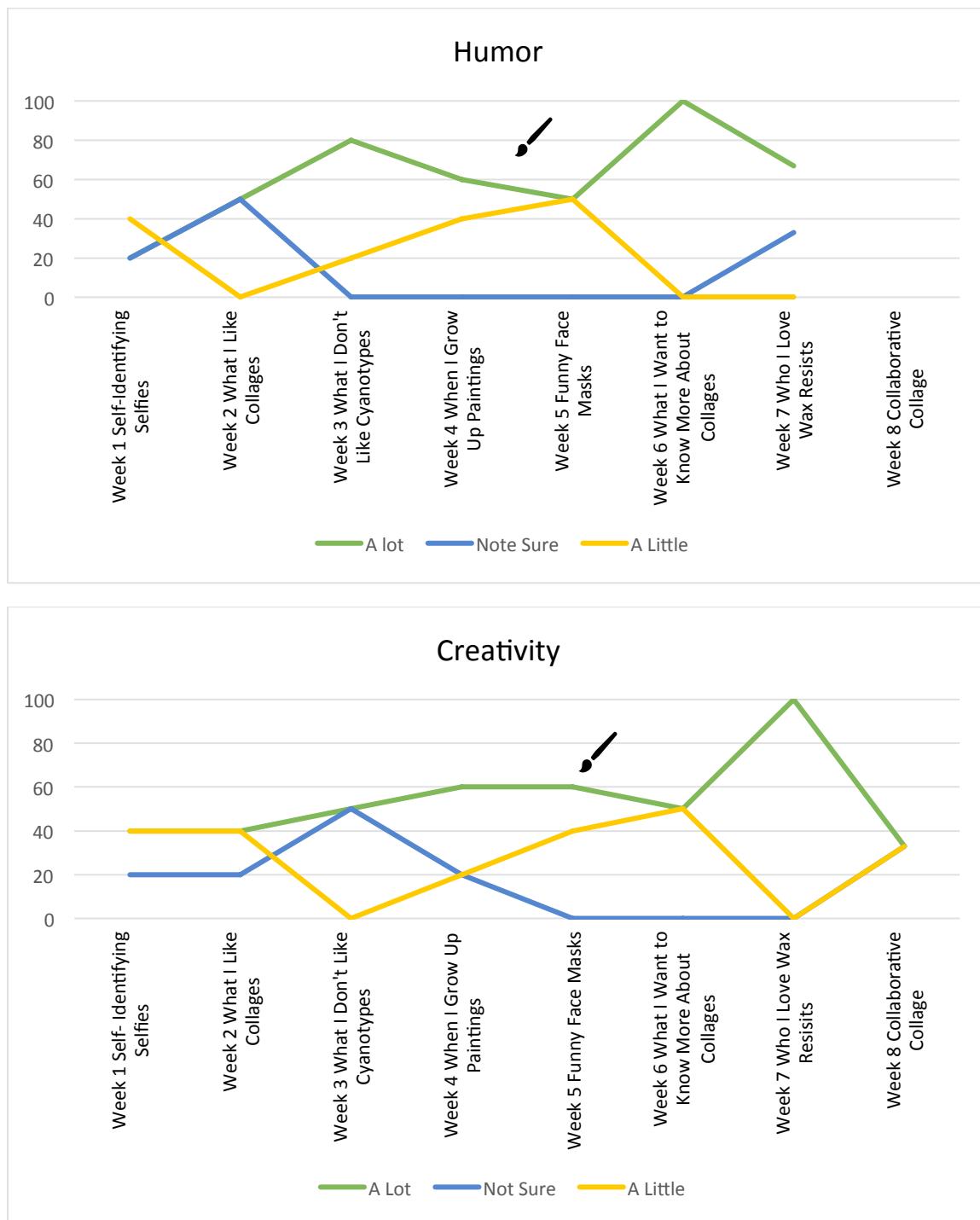




Figure 15-18. Show student survey answer percentages for the perception of humor, creativity, flexibility, and perseverance throughout the eight weeks. The paintbrush symbol signifies the week in which that factor was used as the project's standard.

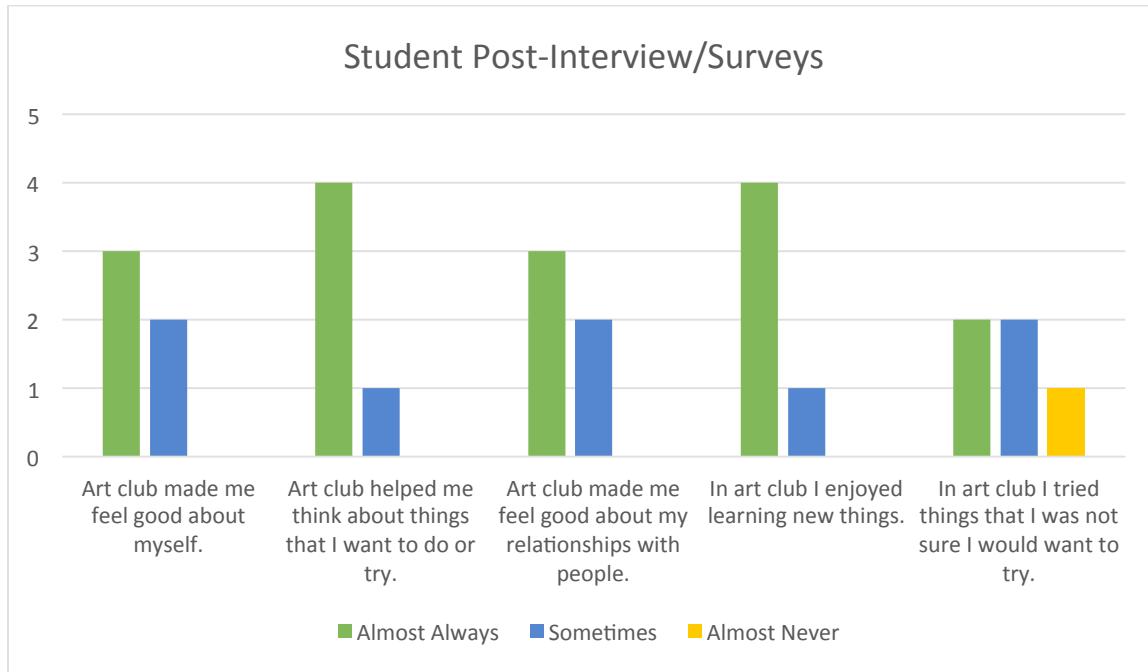


Figure 19. This graph compares the number of student responses to the post art club interviews.

Figure 20. This chart shows the average response to Teacher/Caregiver Surveys.

Please rate your view on how important the following aspects are to your student participant's art education:	1-Very Little to 5 -Extremely Important Average Answer
A classroom culture of caring	5
Feeling safe and developing trusting relationships	5
Providing boundaries and structure	4
Offering choices	5
Learning about contemporary artists	3
Practicing and learning empathy	4
Self-care (emotional/spiritual/intellectual)	5
Current educational standards	3

Art therapy collaboration	4
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Please rate your view on the effect art education has had on your student participant's development of the following traits:	1-Not Much to 5- A Whole Lot
	Average Answer
Creativity	4
Positive relationships	3
Humor	3
Independence	4
Positive view of personal future	3
Flexibility	4
Joy of learning	4
Self-motivation	4
Competence	4
Self-worth	4
Perseverance	4

Observations. On the observation data sheet the student responses to how they felt at the beginning and end of each art club session were recorded. Students tended to respond very similarly. On all but four occasions students responded with some form of “good” at both the beginning and end the session. On four occasions students responded, “tired” at the beginning of the session. On three of these occasions, those students reported feeling good at the end of the session. In only one case the student reported still feeling tired at the end of the session.

The most notable change in student attitude I observed was in Kari. At the beginning of the two months Kari often responded to choices by saying, “I don’t know.” When forced to decide, she often copied choices made by another student. I continued to observe this for several weeks until deciding it warranted a discussion with Kari. We discussed how it was difficult for her to make decisions, but that for the purposes of the art club, it was very important for her to do so. From that point on I took extra care to more frequently encourage her with verbal praise. Toward the end of the two months I observed Kari making choices that were different from any of her classmates. She appeared more confident in her decisions by answering quickly and not wavering from her initial response.

Other notable observations also centered on the development of the expression of individuality. James began making choices that were not necessarily popular with the rest of the group. After accidentally pulling up images of dead mice during our search for things the students did not like, I quickly closed the window. As the group erupted in laughter, James responded with his communication device, “I like without head.” For the topic, “what I want to know more about,” James chose “making bacon” and worked with images of dead pig carcasses and raw meat.



Figure 21. 3/21/17 James chose “making bacon” as the topic he would like to know more about. He chose to draw over the images using red solid tempera.

Molly continued to work with the theme of celebrities and pop culture throughout the art club. Through conversation Molly expressed that she preferred collage because it allowed her to use the Internet and incorporate images of her favorite celebrities into her work. As a result of this information an attempt was made to incorporate these images into other projects. She showed an increase in enjoyment based on personal meaning and relevance to the work.

Heather expressed strong enthusiasm for the art club throughout the two months. This was evident in her survey responses as well as her demeanor and vocalizations. On her mother’s parent survey, she stated, “I believe she enjoys the opportunity to take part in art making but I don’t know how much of that is the result of the art making or the fact that her relationships with teachers and experiences have always seemed positive”

(Parent/ Caregiver Survey, February, 2012). During the art club, Heather was observed making independent choices despite her lack of ability to verbally communicate or proficiently use her communication device. When given the choice of using an adaptive hat to use materials such as a paintbrush or glue stick, she decided to use her hand, even though it posed more of a challenge.

Sadie continued to make confident choices throughout the two months. As Sadie grew in her comfort level with me she began trying to hold my hand more and more often. Sadie used her communication device one week to tell me, “Sarah I love you and babies.” The following week Sadie continued to explain using her device to say, “Sarah, I love you because I have a step-sister Sarah (Personal Communication, March 2017). Sadie also interacted well with her classmates. She appeared to have particularly strong relationship with James and often conversed back and forth with him in a playful manner. She showed a strong sense of humor and burst into laughter on a regular basis. During an Internet search for animals, Sadie went to the animal noise page on her device and began hitting buttons. When the repeated animal noises began to lose their comedic effect, she then began grabbing my hand and using it to hit the animal noise buttons.

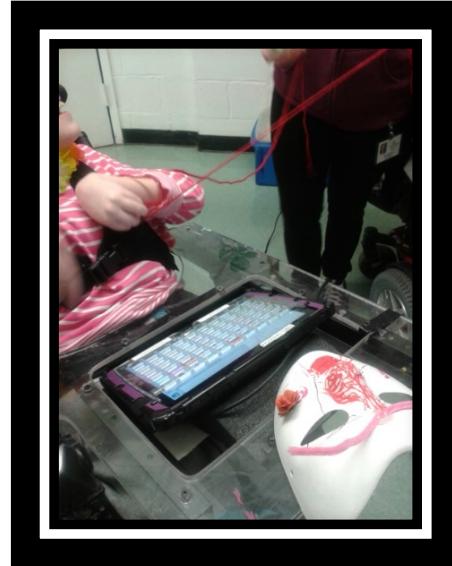


Figure 22 and 23. 3/7/17 Sadie needed to position her hands in such a way to be able to hold up the mask on her own. After deciding with her teacher that it was a rather fitting pose we all had a good laugh! Later she paints “make-up” on her mask utilizes the social worker to help her cut and glue yarn for hair.

My overall observations of the classroom followed closely the information I had gathered from my observances in the students' typical art class. Humor was ever present, while incorporating art historical references took a large amount of time and effort. Students were observed taking advantage of almost all the choices given. Art club sessions were often interrupted by personal care needs or other school activities, however, students were quick to jump right into projects and make up for lost time.

Figure 24. This chart shows the variety of topic choices made by the students over the span of the two-month art club.

Student Theme Choices

James	silly	Music	cabbage, brussel sprouts	farm, join the Air Force	shiny- rhinestones and glitter	making bacon	Samant ha
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Kari	silly	Frozen, puppies	vegetables, crabs	live with friends	unclear	Taylor Swift	n/a
Molly	Wanda Sikes, Michael Jackson, Usher, beautiful	flowers, beautiful ,	rats in a house	work at Mc Donald's ,	scary	Beauty and the Beast movie 2017	Mom, T.A., James from Big Time Rush
Heather	purple	strength, elephant	spelling, cheeseburger s	volunteer with children	flowers	designing and making clothes	n/a
Sadie	Puppies, silly	babies, puppies, stars	carrots, bees	fight fires with Dad	make-up	babies	little sister



Figure 25. This photo of When I Grow Up Paintings lined up to dry shows the variety of color choices and materials students chose.

Data Analysis

Surveys and interviews. The pre-art club data was collected solely as means of finding a baseline for the instances of resiliency building characteristics in the participants' typical art class experience. The intention of the art club was to raise those instances during the art club sessions. The information proves to be more valuable as a comparison than as a quantity. This is because the purpose of the data collection for the art club was not to keep track of the number of these instances but rather to gain an understanding of how present they were, which factors needed more attention, and to gain a general idea of what would constitute an increase in factors. For instance, graphing pre-data alerted me to the difficulty in incorporating art-historical references into student projects. It also showed that while instances of humor were abundant, attaching meaning to the artwork could use more attention. See Fig. 14.

Student participant surveys taken weekly at the completion of each project showed that while responses often waivered, the consensus was that students did perceive the elements of humor, creativity, flexibility, and perseverance in the art making process. The number of “a lot” answers over time would suggest that as students repeatedly filled out surveys, their awareness of these elements (characteristics that build resiliency) also increased. One factor that should be noted as a possible determining factor is that on week seven when students answered 100 percent “a lot” to all elements there were two students absent which decreased the club size by 40 percent. While the study does not have enough data to prove so, it should be considered that one possible explanation for this could be that the smaller size group allowed for more student-centeredness. See Figures 15-18.

Post art club student interview/surveys were aimed at collecting data on some of the factors that increase resilience that were not addressed in the weekly student surveys. Statements were aimed at discovering if students felt that self-worth, self-motivation, a positive view of personal future, independence, competence and the joy of learning were present during the art club activities. The student responses show that the majority answer was “Almost Always” and with the exception of one statement, there were no “Almost Never” responses. This changed with the last statement, which could be considered to almost be a “trick question.” The wording of this statement includes, “something I didn’t want to do.” The fact that most students did not answer “Almost Always” shows that they are given honest responses. One student in fact, responded to this statement “Almost always, ahh, I hate it.” With the overwhelming majority of responses to the group of statements being “Almost Always,” it can be concluded that the students did indeed experience the presence of these five factors that foster resilience. It can also be concluded that the students have at least a basic concept of these five factors and how they apply to art making. See Fig. 19.

The teacher/ caregiver surveys were aimed at answering three questions: How important do teachers and caregivers view aspects of their students art education that are thought to help promote resiliency through art education? ; How present do they currently feel factors that promote resiliency are in their student’s education? ; And, What if any are their experiences with their students use of art as a way to combat the effects of trauma and be resilient? The purposes of this portion of the survey was to get additional information that might help me to better understand my students and to retrieve information that might help answer the question, “How might fostering resiliency through

art education help teachers who work with students with severe physical disabilities?"

Average responses to teacher surveys showed that many of the suggestions for fostering resilience through art education were "Extremely Important." None of the averages for the "effect art education has had on your student participant's development of the following traits (characteristics that increase resilience) were rated as "Extremely Important." See Fig. 20. This shows an unfortunate divide between the perceived importance, according to teachers and caregivers, and the prevalence of these characteristics in their students current art education. It should be noted that while one art educator was asked to participate in the survey, there were no art educator respondents. The information on the surveys has been gathered from parents, teachers, therapists, and aides who have assisted in the students' art classes, but have not designed or led lessons. One could speculate that had more art educators participated in the survey, the results would differ slightly. Even so, the information offered by the survey participants is both from primary and secondary experiences and should be given due respect.

Further survey responses show the value and desire for students to participate in a resiliency building approach to art education. Participants report students showing increased self-esteem, being able to express emotions through art, using art to "ease both frustration and anxiety" and be used as a "positive distraction when the student perseverated on negative thoughts." One participant responded by writing:

Our students can communicate through art. Our students face frustrations with being unable to express their thoughts and feelings. We cannot always look at a student and understand their thoughts and feelings. Art allows our students to

communicate in a way unique to them, in a way that they wish to communicate.

Art is a universal way to communicate self-expression. Our students get to be “included. (Parent/Caregiver Survey, March 28, 2017)

While teacher caregiver surveys expressed the value of a resiliency building approach to art education, they also expressed concern about the difficulties the students face in being able to participate in this approach. One participant responded, “She can’t independently create art and she is always limited by the choices she is presented with by whoever is facilitating her involvement.” This statement expressed clear concern over not only the limitations of accessing materials but to the reduction of choice and independence that often come as a result.

Observations. Observing Kari was exciting to do. Through the two months she began making her own choices and expressing her needs more clearly. My observations led me to believe that she is highly interested in being part of a social group, but struggles somewhat to fit in to her class. As the weeks passed by, she began showing signs of confidence, such as making her own choices, and she also was more encouraging and complimentary to her classmates. Both characteristics point to her growth towards more meaningful, trusting relationships.



Figure 27. At the completion of the art club each student received a personalized certificate of achievement.

The growth I observed in James was primarily his development as an artist.

James showed himself to be ready and willing to be as independent as he possible could and to take on the added responsibilities that come with that. He showed excitement over getting to use the hand held adaptive scissors rather than the switch operated ones. He didn't hesitate when it came to decision making even when questioned. As James was given more and more choices, his artwork became more distinguishable from the other students work. He received the certificate of achievement for "excellence in bold choice making, demonstrating a strong spirit of independence, and helping his teachers and peers."

Heather also showed a great deal of enthusiasm for independence and choice making. Although Heather has a harder time independently handling art materials than

James, she too showed her strong will by choosing to use the paintbrush with her hand over the more controlled adapted brush hat. She always made choices that reflected her own interests. Heather received the certificate of achievement for “excellence in demonstrating her enthusiasm and individuality through the art making process.”

The observations I made of Molly showed that she needed a way to connect her own interests to the art making process to more fully enjoy and benefit from it. Molly showed dislike for painting because her physical limitations leave her unable to figuratively represent the celebrities and people she is interested through painting. She vocally expressed her preference for collage and enjoyed other forms of art making more when an element of collage was added to them. Molly received the certificate of achievement for “excellent use of the appropriation of popular culture, technology, and humor in the art making process.”

I observed Sadie to be highly motivated by humor and meaningful relationships. This made fostering resiliency through art education a great fit for her. Providing an element of humor for her meant simply allowing her to feel comfortable and safe enough to act on her natural tendency to recognize the comical side of life. Giving her the opportunity to engage in silly behavior and meaningful relationships both in the delivery and content of the art club projects appeared to make her happier and more engaged in the art making project. Her confidence appeared to increase as she practiced using these traits in her artwork. Sadie received the certificate of achievement for “excellent use of humor, exploration, and building positive relationships through the art making process.”

Samantha’s classmates recognized her by presenting her with “The Muse Award.”

Samantha's participation in the club was so minimal that it would have been insincere to present her with a participation certificate. At the same time, it was important to recognize Samantha as a valuable member of the class. On more than one occasion, students chose Samantha as the theme of a piece of artwork. When I suggested that we, as a club, present her with the award, the students unanimously and enthusiastically agreed.

Findings

Given that 7-21 year old students with severe physical disabilities face emotional challenges due to issues such as separation from loved ones, repeated surgery and the death of peers, and Heise (2014) suggests that resilience theory applied to art education can strengthen protective factors and coping skills in individuals facing new and challenging experiences, in what ways might a strength-and resilience-building approach to art education impact students with severe physical disabilities? The effects that fostering resiliency through art education had on the members of the “Awesome” Art Club have proven to be overwhelmingly positive with very few hitches. Presenting students with severe physical disabilities with a resiliency building atmosphere and curriculum does require a great deal of time and effort. Interruptions such as personal care and behavior interventions can make covering all the desired subject matter difficult. Besides these minor challenges, the concept of fostering resiliency through art education seems to be a natural fit for populations of children with severe physical disabilities. The students who were involved in the club

showed both clear signs of enjoyment and an understanding of how the factors that help build resilient individuals can enhance their art education experience.

Furthermore, how might this strength- and resilience-building approach to art education that considers students' emotional needs build the confidence and success levels of art teachers working with students with severe physical disabilities?

As an art educator, I can say from experience that happy students make for a more teachable class. It would be a massive misstatement, however, to say that our goal as art teachers should be to make our students “happy.” A better way to approach this subject is to say that as an art educator I have a unique and valuable opportunity to better my students lives through an art education that supports their physical, emotional, and intellectual needs and that will help them face any possible obstacles that may come to stand in the way of their well-being. As we seek to do this for our students, it is my belief, based on experience, that the role of an art educator will be more fulfilling and better support our own well-being and job satisfaction. Beyond the benefits a resiliency based art education for children with severe physical disabilities offers the art educator, we need to consider the desires of the teachers and caregivers who are looking for their students to experience this type of support. They have witnessed their children face adversities, they have seen art used by their students to heal, encourage, explore, challenge. They want an art education for their children that will raise the bar on relevancy and personal value to their children’s lives. That was made very clear to me through the interviews and surveys that I conducted.

The components that I have found to be the most helpful in presenting a resiliency based art education to students with severe physical disabilities are: offering a student-

centered curriculum, offering numerous choices, maintaining an emotional check-in, receiving regular student feedback, and maintaining an enjoyable classroom atmosphere. The student-centered curriculum I used for the “Awesome” Art Club was also resiliency focused. Offering a variety of choices to my students was even more important because of their physical limitations. I was often surprised by the choices they made. My surprise provided a clear indication that allowing students as many choices as possible meant supporting their independence. Regularly asking my students how they were feeling at both the beginning and end of each session, allowed me to get a sense of how well the art club was meeting students’ needs. If a student was coming into art club happy and leaving upset, that might have been an indication that the club was not supporting resiliency. The emotional check-in also served me as a teacher to focus my energy on the goals of the art club. Regular student feedback allowed me to learn more about my students and helped me to adjust projects to be more student-centered.

Maintaining an enjoyable classroom environment came rather easy. Including humor in the art club was as simple as allowing the students to act natural, be who they were, and responding to them in a light-hearted manner. Reminding myself how art education can benefit students through fostering resiliency, allowed me to let go of any desire for perfection, and kept my focus on being an encouraging, positive, safe and trustworthy teacher.

Chapter 5: Conclusions

Implications for the Field

The data collected during this case study suggests that fostering resiliency through art education is a viable pedagogy for teaching students with severe physical disabilities. Students clearly displayed both active engagement in the projects and growth in the characteristics that are found in resilient individuals. While to those who have experience working in the field of special education, this outcome could be considered predictable, it is important to note that this pedagogy is not the current standard. Furthermore, individuals who do not have art making experience with students with disabilities may be looking for more concrete examples of how this ideology plays itself out in real time. These points considered there is still a need for longer-term studies in order to see if students are able to use art making to build resilience. While initial results certainly implicate that they are, this study accepts that building resiliency through art education works. It is a belief based on resilience theory and prior studies. Due to the nature of building resilience being accumulative, longer-term studies would help prove its effectiveness with this specific population.

In September of 2017, I plan to present this study at the 1st International Conference of Art, Education and Disability in Helsinki, Finland. I am excited to exchange my ideas with an international population. I also hope to present the information I learned from this study at HMS School for Children with Cerebral Palsy to get and give more internal feedback on the benefits of an art education to the students

there. Next year, I will submit proposals to present this information on a state and national level in hopes for the exchange of information to reach more art educators.

Next Questions

As I addressed in the prior section, the question that begs to be asked next is does the practice work long-term? When we know more about the lasting effects of building resiliency through art education for children with severe physical disabilities, we can better encourage and empower art teachers with this information. More studies could be done with art educators to access the benefits they find to using this art pedagogy. Once the educators recognize the benefits for themselves and the students they teach, then we can look at how we can encourage schools to recognize the need for this sort of art education pedagogy for students with severe physical disabilities?

I would challenge every art teacher to ask themselves the question, “How does the education that I am offering my students benefit those students who will never have a career as an artist, art historian, art educator or designer? And, why should those students still be engaged in an art education?” These questions are unavoidable when one sets out to present an art lesson to a child with severe physical disabilities. It is a question that I suggest, should take front seat. When we recognize the overwhelming benefits of an art education for all, we must teach with that conviction. When we teach with that conviction, we will positively affect the appreciation of arts in our culture at large.

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Appendix A

Protocols

Pre- Non-Participant Data Protocol

Date	Time	
CLASSROOM DEMOGRAPHICS:		CLASSROOM DIAGRAM
<i>CLASS DESCRIPTION:</i>		
# STUDENTS:		
# OF TEACHERS:		
# OF AIDES:		
# OF THERAPISTS PRESENT:		
CLASS ACTIVITY:		
DESCRIPTION OF ACTIVITY:		

(Newman-Godfrey, 2016).

KEY

Choice-making

As defined by a student making a personal decision that will affect the outcome of their artwork.

Positive attitudes

As defined by anyone in the environment that comments or gestures in a positive way.

Humor

Any event of laughter or smiling because of a comic event.

Attaching meaning

Any verbal attempt to refer to significance of the artwork beyond the present.

Affirming strengths

Any verbal or non-verbal attempt at acknowledging a student's abilities.

Art-historical references

Any verbal or visual attempt to relate the artwork being created to a historically relevant source.

Listening

Defined by a staff or teacher's motion to give a student silent attention for 15 seconds or longer followed by a response of acknowledgement.

Artwork/Process Observation Protocol**Date:****Time:****Title of Activity:**

Observable behaviors in student process and artwork	Descriptive Notes	Reflective Notes
Appearance of mood beforehand		
Engagement with material		
Decision making		
Themes / Purpose / Recognizable Forms		
Joy / Engagement with process		
Naming Process		
Spec. Ed. Interventions		
Appearance of mood upon completion of lesson		(Newman-Godfrey, 2016)

Survey Protocol

Student Participant survey

Project Name: _____ Student Name: _____

Name of assistant who helped fill out survey:

	A lot	Not sure	A little
How much did you feel humor (laughing, smiling, telling jokes) was a part of this art project?			
How much did you feel creativity (coming up with new ideas, imagination) was a part of this art project?			
How much did you feel perseverance (sticking with it until the end) was a part of this art project?			
How much did you feel flexibility (being willing to change and compromise) was a part of this art project?			

Participant Teacher/ Caregiver Survey

Date:

I am a teacher parent caregiver other _____.

Please rate your view on how important the following aspects are to your child's art education:

1- very 2 3 4 5- Extremely
little

A classroom culture of caring				
Feeling safe and developing trusting relationships				
Providing boundaries and structure				
Offering choices				
Learning about contemporary artists				
Practicing and learning empathy				
Self- care (emotional/spiritual/intellectual)				
Current educational standards and ideas				
Art therapy collaboration				

Please rate your view on the affect art education has had on your student participant's development of the following traits:

1 not much 2 3 4 5 a whole lot!

Creativity					
Positive relationships					
Humor					
Independence					
Positive view of personal future					
Flexibility					
Joy of learning					

Self-motivation					
Competence					
Self-worth					
Perseverance					

Have you ever seen your student participant use art to cope with difficult situations (example: homesickness, loss of friends, surgery, major changes)?

Please share at your comfort level:

Have you seen any positive results of art making in your student participant's life that were not covered in the survey?

Please share at your comfort level:

Lesson Plans

SELF-IDENTIFYING SELFIES

Grade Level: Age 7-21 special needs, physical disabilities

Activity: Self-Identifying Selfies

Materials: Computer, Photo Booth program, switches, printer, paper, copies of words and images, switch adapted scissors, glue, adapted brushes, Mod Podge.

Objective: Through the use of mixed media (computer, Photo Booth program, switches, printer, paper, copies of words and images, switch adapted scissors, glue, adapted brushes, Mod Podge) students will create self-identifying collages in order to use art as means to develop self-worth.

Developmental Rationale/ Prior Learning: During this lesson, students will take selfies using the computer and adaptive switches and create self- representational collages with them. Students with severe physical disabilities often lack independence and choice making opportunities. This project is designed to give the maximum amount of choice making opportunities as well as allow students to do the maximum amount of independent work that they are able to. This project allows follows the theme, Fostering self-worth by giving students the chance to present themselves as they would like to be represented and being able to then view themselves as they are.

Standards:

Fostering Self Worth (Heise, 2011; Benard, 1991; Bosworth & Walz, 2005; Krovetz, 1999).

Spark: Students will be asked to point to the picture symbol of how they feel upon entering art club.

Today we will be doing an exciting art making activity called Self-Identifying Selfies. Does anyone know what a selfie is?

Association:

- Do you know anyone who has a cellphone?
- People often take selfies on a cellphone; a selfie is when you take your own picture.
- Do you or anyone you know have a Facebook page?
- We often find selfies on Facebook.
- Can you think of a way we could take selfies?

Visualization: Demo on how to take a selfie with Photo Booth

Recap: Review list of helpful hints, ask student participants if they have any questions

Transition:

Once everyone has taken several selfies we will look through, decide on which ones to use and print selfies.

Clean-up:

We will travel together as a group to go retrieve selfies from the printer.

Closure:

- Students will share their selfies with each other and ask how they feel about them.
- Students will be asked to point to the picture symbol of how they feel at the end of art club.

Appendix B
Permissions

MOORE COLLEGE OF ART AND DESIGN
ART EDUCATION WITH A SPECIAL POPULATIONS EMPHASIS

INFORMED ASSENT FOR STUDENTS

DESCRIPTION OF THE RESEARCH: You are invited to participate in a research study that investigates ways of applying resilience theory to art education that can benefit students with severe orthopedic impairments. It is hoped valuable information on how to best structure art education for students with severe orthopedic impairments will be revealed throughout the course of this research study. For this study, you will participate in research sessions over the course of 8-10 weeks. These sessions are extra opportunities to engage with and possibly make art beyond your existing art class. Participation will in no way impact your regular school schedule, IEP programs, or vocational training. I will not be asking to view any of your personal information such as IEPs, student records, or behavior programs. During all research sessions, you may be video recorded. These video recordings will provide information that I will use in writing my dissertation and the video recordings will be destroyed upon the completion of my study. This study will take place at HMS School for Children with Cerebral Palsy and I, Sarah Swanson, will conduct the research study.

RISKS AND BENEFITS: Participation in the study is completely voluntary. There will be no effect on your standing or grades should you decide not to participate in this study. The research has the same amount of risk you will encounter during a usual art or classroom activity. However, you may feel uncomfortable engaging with a new person or a new type of activity. If this occurs or if you feel uncomfortable at any point in this study, special arrangements can be made, and/or you can pull out of the study without penalty or repercussions. The benefits from the study include positively affecting students' participation in art in school and learning to use art making for self-care. It is also hoped that I will learn through the study more about how to provide a supportive arts learning environment that will influence art instruction for students with severe orthopedic impairments.

PAYMENTS: There will be no payments for you for participation in this study.

DATA STORAGE TO PROTECT CONFIDENTIALITY: Subject's confidentiality will be preserved. I am the sole researcher of this study. For the collation, analysis and reporting of all data, all the participants will be assigned a pseudonym to prevent individuals from being identified. Any charts used in my thesis or presentations will be coded. All the data that I collect for this research project will be kept in a locked file cabinet in my home. The video recordings will be destroyed upon the completion of my thesis. I will reserve the right to use the data and photographs of student artwork but the students' identify will continue to remain confidential.

TIME INVOLVEMENT: Your participation in the study will take approximately 8-10 weeks.

HOW WILL RESULTS BE USED: The results of the study will be used in drawing conclusions from the investigation on how applying resilience theory to art education can increase the factors that protect from trauma in adolescents with severe orthopedic impairments. The study will be reported in the form of a thesis, which serves to fulfill my requirements for a master's degree in Art Education with a Special Populations Emphasis.

Sarah Swanson, Sswanson@Moore.edu

MOORE COLLEGE OF ART AND DESIGN
ART EDUCATION WITH A SPECIAL POPULATIONS EMPHASIS

PARTICIPANT'S RIGHTS

Principal Investigator: Sarah Swanson

Research Title: The Impact of Resilience Theory Applied to Art Education on Students with Severe Orthopedic Impairments

- I have read and discussed the Research Description with the researcher. I have had the opportunity to ask questions about the purposes and procedures regarding this study.
- My participation in this research is voluntary. I may refuse to participate or withdraw from participation at any time without jeopardy to future medical care, employment, student status or other entitlements.
- The researcher may withdraw me from the research at his/her professional discretion.
- If, during the course of the study, significant new information that has been developed becomes available which may relate to my willingness to continue to participate, the investigator will provide this information to me.
- Any information derived from the research project that personally identifies me will not be voluntarily released or disclosed without my separate consent, except as specifically required by law.
- If at any time I have any questions regarding the research or my participation, I can contact the investigator, who will answer my questions. The investigator's phone number is (267) xxx-xxxx.
- If at any time I have comments, or concerns regarding the conduct of the research or questions about my rights as a research subject, I should contact
 - I should receive a copy of the Research Description and this Participant's Rights document.
 - If video recording is part of this research,
 - I () consent to being video recorded.
 - I () do NOT consent to being video recorded.

The written, artwork and videotaped materials will be viewed only by the principal investigator, inter-rater scorers, and members of the program faculty.

- Written, artwork, and audio taped materials,
 - () may be viewed in an educational setting outside the research.
 - () may NOT be viewed in an educational setting outside the research.

Sarah Swanson, Sswanson@Moore.edu

MOORE COLLEGE OF ART AND DESIGN
ART EDUCATION WITH A SPECIAL POPULATIONS EMPHASIS

My signature means that I agree to participate in this study.

Participant's signature: _____ Date: ___/___/___

Name: _____

If necessary:

Investigator's Verification of Explanation

I certify that I have carefully explained the purpose and nature of this research to
_____ (participant's name) in age-appropriate language.

He/She has had the opportunity to discuss it with me in detail. I have answered all his/her
questions and he/she provided the affirmative agreement (i.e. assent) to participate in this
research.

Investigator's Signature: _____

Date: _____

MOORE COLLEGE OF ART AND DESIGN
ART EDUCATION WITH A SPECIAL POPULATIONS EMPHASIS

INFORMED CONSENT FOR STUDENTS

DESCRIPTION OF THE RESEARCH: Your child is invited to participate in a research study that investigates ways of applying resilience theory to art education that can benefit students with severe orthopedic impairments. It is hoped valuable information on how to best structure art education for students with severe orthopedic impairments will be revealed throughout the course of this research study. For this study, your child will participate in research sessions over the course of 8-10 weeks. These sessions are extra opportunities to engage with and possibly make art beyond his or her existing art class. Participation will in no way impact the regular school schedule, IEP programs, or vocational training. I will not be asking to view any personal information on students such as IEPs, student records, or behavior programs. During all research sessions, students may be video recorded. These video recordings will provide information that I will use in writing my thesis and the video recordings will be destroyed upon the completion of my study. This study will take place at HMS School for Children with Cerebral Palsy and I, Sarah Swanson, will conduct the research study.

RISKS AND BENEFITS: Participation in the study is completely voluntary. There will be no effect on your child's standing or grades should you or your child decide not to participate in this study. The research has the same amount of risk students will encounter during a usual art or classroom activity. However, your child may be uncomfortable engaging with a new person or a new type of activity. If this occurs or if your child feels uncomfortable at any point in this study, special arrangements can be made, and/or you can pull your child out of the study without penalty or repercussions. The benefits from the study include positively affecting students' participation in art in school and learning to use art making for self-care. It is also hoped that I will learn through the study more about how to provide a supportive arts learning environment that will influence art instruction for students with severe orthopedic impairments.

PAYMENTS: There will be no payments for you for your child's participation in this study.

DATA STORAGE TO PROTECT CONFIDENTIALITY: Subject's confidentiality will be preserved. I am the sole researcher of this study. For the collation, analysis and reporting of all data, all of the participants will be assigned a pseudonym to prevent individuals from being identified. Any charts used in my dissertation or presentations will be coded. All the data that I collect for this research project will be kept in a locked file cabinet in my home. The video recordings will be destroyed upon the completion of my thesis. I will reserve the right to use the data and photographs of student artwork but the students' identify will continue to remain confidential.

TIME INVOLVEMENT: Your child's participation in the study will take approximately 8-10 weeks.

HOW WILL RESULTS BE USED: The results of the study will be used in drawing conclusions from the investigation on how applying resilience theory to art education can increase the factors that protect from trauma in adolescents with severe orthopedic impairments. The study will be reported in the form of a thesis, which serves to fulfill my requirements for a master's degree in Art Education with a *Special Populations Emphasis*.

MOORE COLLEGE OF ART AND DESIGN
ART EDUCATION WITH A SPECIAL POPULATIONS EMPHASIS

PARTICIPANT'S RIGHTS

Principal Investigator: Sarah Swanson

Research Title: The Impact of Resilience Theory Applied to Art Education on Students with Severe Orthopedic Impairments

- I have read and discussed the Research Description with the researcher. I have had the opportunity to ask questions about the purposes and procedures regarding this study.
- My participation in this research is voluntary. I may refuse to participate or withdraw from participation at any time without jeopardy to future medical care, employment, student status or other entitlements.
- The researcher may withdraw me from the research at his/her professional discretion.
- If, during the course of the study, significant new information that has been developed becomes available which may relate to my willingness to continue to participate, the investigator will provide this information to me.
- Any information derived from the research project that personally identifies me will not be voluntarily released or disclosed without my separate consent, except as specifically required by law.
- If at any time I have any questions regarding the research or my participation, I can contact the investigator, who will answer my questions. The investigator's phone number is (267) xxx-xxxx.
- If at any time I have comments, or concerns regarding the conduct of the research or questions about my rights as a research subject, I should contact
 - I should receive a copy of the Research Description and this Participant's Rights document.
 - If video recording is part of this research,
 - I () consent to having my child video recorded.
 - I () do NOT consent to having my child video recorded.

The written, artwork and video taped materials will be viewed only by the principal investigator, inter-rater scorers, and members of the program faculty.

- Written, artwork, and audio taped materials,

MOORE COLLEGE OF ART AND DESIGN
ART EDUCATION WITH A SPECIAL POPULATIONS EMPHASIS

- () may be viewed in an educational setting outside the research.
- () may NOT be viewed in an educational setting outside the research.

My signature means that I agree to participate in this study.

Participant's Guardian's signature: _____ Date: ___ / ___ / ___

Name: _____

If necessary:

Investigator's Verification of Explanation

I certify that I have carefully explained the purpose and nature of this research to
_____ (participant's name) in age-appropriate language.

He/She has had the opportunity to discuss it with me in detail. I have answered all his/her
questions and he/she provided the affirmative agreement (i.e. assent) to participate in this
research.

Investigator's Signature: _____

Date: _____

MA THESIS CONSENT FORM

RESEARCH SITE SUPPORT FORM

Principal / administrator name

Research site / school name

Address

Date

To Whom It May Concern:

I, _____, give permission to Sarah Swanson to conduct an action research study at HMS School for Children with Cerebral Palsy during the spring 2017 semester in order to fulfill the requirements of his/her Master's thesis at Moore College of Art and Design. I understand that this project is intended to research the impact of resilience theory applied to art education for students with severe orthopedic impairments.

I understand that Sarah Swanson will be a teacher-researcher who will be teaching art while gathering data during _____(i.e. school day, after school, etc.). I understand that she has distributed and collect consent forms. I understand that she will be conducting an art club with participants twice a week for 45 minute to one hour time periods, and while a fixed time will be agreed upon, she may request to make up sessions per students' availability. I understand she will be using art materials such as paint, glue, oil pastel, scissors, cyanotype (sun-print) materials and will require access to a computer and printer. I understand she/he will be collecting data using various methods including observation, interviews, surveys and conversation with selected teachers.

Sincerely,

MA THESIS CONSENT FORM

TEACHER CONSENT

TEACHER

TITLE

SCHOOL NAME

ADDRESS

DATE

Dear Participant:

I am a Graduate Student in Art Education at Moore College of Art & Design. I will be conducting research for my MA thesis from February 1, 2017 to April 30, 2017.

The purpose of this study is to examine how fostering resilience theory to art education can impact students with severe physical disabilities.

Participating in this study is voluntary, and you can refuse to participate. If you agree to participate, participation will be February 1, 2017 to April 30, 2017. You will meet with me when times are convenient with you. You will not receive payment for participating in this study.

This study poses very little risk to you. Though I will disguise your identity in the final thesis, there is a possibility that details of your story will make you identifiable. This possibility could result in the public disclosure of various aspects of your life. In order to minimize this risk, I will change your name and any other obvious identifying information in the final thesis. Throughout the study, I will also discuss with you what details you feel comfortable having included in any final products. Additionally, you are permitted to withdraw from the study at any time. If you withdraw, all existing interview recordings and transcripts will be destroyed immediately.

If you have any questions or concerns about the study, or if you are dissatisfied at any time, you can contact me at Sswanson@moore.edu or the Graduate Program Director in Art Education

Lauren Stichter, at (215) 667-6811 or lstichter@moore.edu. You are encouraged to ask questions at any time about the study and its procedures, or your rights as a participant.

Sincerely,

Sarah Swanson

Statement of Consent: I have read the above information and have received answers to my questions. I give my consent to participate in this study.

Printed name of Participant _____

Signature of Participant _____

Date _____